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ABSTRACT

This project's main objective was to field test competency-based vocational education (CBVE) student learning guides developed during 1979-1981 at Ridge Vocational-Technical Center (RVTC) (Florida). The learning guides were for six programs: clerical occupations, cosmetology, heavy duty truck/bus mechanics, industrial electricity, masonry, and welding. Three different models for field testing were considered: preservice (cosmetology), decentralized (welding), and on-site field testing. Another objective of the project was to recommend one of these models for field testing that could be used in testing other RVTC programs and other CBVE materials. Twenty field test sites, including secondary schools, community colleges, and vocational-technical centers, were selected in each of the five vocational education regions, and instructors were identified and trained. The participating instructors reviewed all the program guides during the project year and field tested 20-40 percent of the guides with their students. As a result of the field testing and a comparison of the three models, the on-site field-test model was recommended for field testing other RVTC programs. The phases of this model include a two-day orientation workshop, two field-test site visits, and a two-day exit workshop. Appendixes include evaluation forms, a sample student learning guide, lists of participants, workshop agenda and evaluation, participant comments, and task listings for the six field-tested programs. (KC)

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# Final Report

Project No. USF 2-1C11

From August 1, 1981 to June 30, 1982

# Field Testing Competency-Based Vocational Education Student Learning Guides Developed at Ridge Vocational-Technical Center

University of South Florida
College of Education
Tampa, Florida 33620

Dr. Robert E. Andreyka
Project Director

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## ABSTRACT OF THE FINAL REPORT

Title of Project: Field Testing Competency-Based Vocational Education Student Learning Guides Developed at Ridge Vocational-Technical Center

Organization: University of South Florida

Project Director: Dr. Robert E. Andreyka

Expenditures: $ 40,000.00

Duration of Project: August 1, 1981 to June 30, 1982

Project Number: DVE 2-1C11

### PROBLEM

Although competency-based vocational education (CBVE) has been a priority of Florida's Division of Vocational Education (DVE) for several years, lack of student individualized materials has hindered implementation in many programs. CBVE student learning guides had been developed in the programs at Ridge Vocational-Technical Center (RVTC), Florida's CBVE Demonstration Site, but there was no plan established for the review and revision of these materials. Also there was no systematic way planned to disseminate the materials to other Florida schools to aid in the implementation of CBVE.

### OBJECTIVES

To address this problem, the project's main objective was to field test CBVE student learning guides developed during 1979-81 at RVTC in six program areas. The six programs were: Clerical Occupations, Cosmetology, Heavy Duty Truck/Bus Mechanics, Industrial Electricity, Masonry, and Welding. Three different models for field-testing were considered: Pre-Service (Cosmetology), Decentralized (Welding) and On-Site Field Testing. Another objective was to recommend one of these models for field testing that could be used in testing other RVTC programs and CBVE materials developed elsewhere.

## PROCEDURES

CBVE student learning guides developed at Ridge Vocational-Technical Center (RVTC) in Clerical Occupations, Cosmetology, Heavy Duty Truck/Bus Mechanics, Industrial Electricity, Masonry, and Welding had been tested in the first and second steps of formative evaluation as a means of evaluating the curricula during the years 1978-80. The student learning guides were now ready for the third step in formative evaluation, field-testing, before being sent to the DVE for proposed dissemination. Field test sites were selected in each of the five vocational education regions and instructors identified to participate in the project. A two-day orientation workshop was held at RVTC for the instructor participants. They received inservice on adapting the materials to their individual resources and on the field-testing procedures. The participants were to review all the program guides during the project year and field test 20-40 percent of the total guides with their students.

## RESULT AND POTENTIAL UTILIZATION

Personnel in the Division of Vocational Education (DVE) will carefully examine the effectiveness of field testing CBVE student learning guides developed at RVTC as a strategy in implementing CBVE in other schools and centers. They will also review the evaluations received as a means in the revision of these CBVE materials.

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# PREFACE

Special appreciation is extended to Florida educators who have been instrumental in the success of the field testing project. The involvement of the following individuals and groups and their cooperation during the execution of this study is gratefully acknowledged. Ridge Vocational-Technical Center (RVTC) instructors, Jean Finkbiner; Grace Bliss; Bill Lewis; Arnold Abbott; John Berry; and Dick Bausum had written the competency-based vocational education (CBVE) student learning guides for the six programs that were field tested. They worked closely with the Project Staff and field-test participants during the year long study. Special thanks to the Director of RVTC, Bill Hampton, members of his Support Staff, and the RVTC Demonstration Site Project Staff for their cooperation.

The 37 vocational teachers listed below were involved in field testing the CBVE materials and gave generously of their time and talents.

Region 1

Peggy D. REGISTER, Chipola Junior College, Marianna

Helen D. CROSWELL, Myrtice FLORA, and Bill MIELKE, Thomas P. Haney Vocational-Technical Center, Panama City

Jo DANIELS, Lively Area Vocational-Technical Center, Tallahassee

Isaac LENON, Charles STREIT, and Bruce WALLACE, George Stone Vocational-Technical Center, Pensacola

Region 2

John E. GENTRY, Royce MOORE, Orie R. NELSON, and Thomas E. RYAN, and Robert SUNDMAN, Santa Fe Community College, Gainesville

Rushie DIXON, Shirley ROGERS, and Bill WHITE, Westside Vocational Skills Center, Jacksonville

Region 3

George GAICH, Brevard Community College, Cocoa

Evelyn MILEWSKI, John A. WOLFRAM, and John H. Wolfram, Daytona Beach Community College, Daytona

George CLARK, and Betty HOLLOWAY, Lake County Area Vocational-Technical Center, Eustis

Joe JARREAU, Mid-Florida Technical Institute, Orlando

Dan VARNES, Withlacoochee Area Vocational-Technical Center, Inverness

Region 4

Della ESCOBIO, and William MOORE, Brewster Skills Center, Tampa

Betty J. YATES, Lee County Area Vocational-Technical Center, Fort Myers

Carl E. COATS, Leto Comprehensive High, Tampa

John R. OLDFIELD, Pinellas Vocational-Technical Institute, Clearwater

Otto TOEPFER, Polk Vocational-Technical Center, Eaton Park

Joe HOFFMAN, St. Petersburg Vocational-Technical Institute, St. Petersburg

Region 5

Robert F. QUIDER, Dillard High School, Fort Lauderdale

James L. BRANTLEY, Dayle L. FRANTSEN, and Sara E. PILGRIM, Robert Morgan Vocational-Technical Institute, Miami

Leonard EISENBERG, and Frances E. ROBINSON, South Technical Education Center, Boynton Beach

The local administrators from the 20 area vocational-technical centers, community colleges, and comprehensive high schools listed above supported the project and provided resources and release time for the field-test participants at the local schools.

The Staff at the Division of Vocational Education Offices, Tallahassee, and the Staff at the five Vocational Education Regional Offices assisted in the selection of the programs that participated in the field-testing throughout the State. Their cooperation and interest were evident during the project year. (See Appendix E.)

A very special recognition is extended to Sonia Parmer, Project Coordinator, for her significant professional contributions to the year-long field-testing activities and to the Final Report.

Recognition is also due Marie Tapia, Project Secretary, for her patience in working with the Project Staff and Leigh Andrews, Word Processor, for her skills in typing the various drafts and compiling the Final Report.

Robert E. Andreyka
Project Director and Professor
University of South Florida

# I

# INTRODUCTION

Over the four-year period, 1978 to 1982, model curricula for eighteen vocational education programs were developed at Ridge Vocational-Technical Center (RVTC), Winter Haven, Florida. Prior to proposed dissemination of the RVTC materials by the State of Florida Division of Vocational Education (DVE), field testing of six of these programs was conducted during the second semester of the 1981-82 school year. Twenty schools throughout the State participated in field testing the first-draft RVTC Student Learning Guides for Clerical, Cosmetology, Heavy Truck/Bus Mechanics, Industrial Electricity, Masonry and Welding Programs.

As a result of the impact of Performance-Based Teacher Education (PBTE) (Daniel, 1970; Golden, 1973; Florida State Department of Education, 1971) and Competency-Based Teacher Education (CBTE) (Andreyka, 1976) Competency-Based Vocational Education (CBVE) has been a priority of Florida's DVE since 1975 (Mills, 1975).

Among the CBVE Projects sponsored by the DVE was the establishment in 1979 of a demonstration site at RVTC which included open-entry, open-exit programs (Andreyka, 1981-1982). Included in the activities of these projects were the completion of first-draft student learning guides for all RVTC programs. The RVTC Student Learning Guides were developed using a systematic approach to instruction and include objectives, learning activities, titles of resources, self-checks, and performance tests (Andreyka and Beverly, 1981).

Demonstration sites have been used for many years as dissemination agents for innovations in education. According to Mengel (1979) and Crittenden (1980), the effectiveness of a demonstration site is increased if it is used as part of a comprehensive diffusion strategy and provides support and follow through help in the adoption of the innovations being demonstrated.

## Need

Although CBVE has been a priority of Florida's DVE for several years, lack of individualized materials to place in the hands of students hindered implementation at many schools (Blank, 1982). First drafts of CBVE student learning guides had been developed in the programs at RVTC, but there was no plan established for the review and revision of these materials. Also there was no systematic way planned to disseminate the materials to other Florida schools to help in the implementation of CBVE. The DVE planned to encourage other schools to implement CBVE by having them observe successfully operating CBVE programs at RVTC and by involving them in the field testing of the CBVE student learning guides developed there.

## Definitions

The following definitions are from materials developed at Ridge Vocational-Technical Center including the Manual For Writing Student Learning Guides: The Ridge Format, by Andreyka and Beverly (1981):

Attainment (Mastery). The level of performance or achievement that consistently meets occupational standards set by vocational instructors responsible for a vocational program.

Competency. A task performed to a certain standard.

Competency-Based Vocational Education. A total system for planning, developing and implementing a curriculum that is founded on three primary characteristics:

1. The curriculum is based on tasks directly related to the responsibilities of workers on the job.
2. The tasks that students are required to learn, as well as the means for assessing their attainment, are specified in advance; and this information is available to students, parents, and members of the community at large.
3. Every student is provided with whatever instructional experiences needed in order to attain the tasks required by the job for which the student is training.

Duty. A distinct, major work activity in an occupational area that helps define a job in broad terms so that tasks may be grouped under each duty.

Enabling Objectives. Specific objectives which state the behaviors that are essential in order for the learner to achieve the performance objective.

Entry Level. The lowest position in any promotional line as defined locally by a collective bargaining agreement, past practices or applicable personnel rules.

Field-Testing. A dress rehearsal of program materials. The final stage of formative evaluation, field-testing performs both experimental and political functions: serves to evaluate the curriculum and to build support for it.

Instruction Sheet. A resource included in the learning guide which provides the learner with readily accessible information and new ideas in the exact way in which the individual instructor wishes the learner to receive them.

Introduction. Motivational statements which help the learner become prepared to learn the task. The introduction gives the learner a perception of the purpose and value of the task.

Job Description. A general statement about what a worker on the job does and the conditions under which the person works.

Knowledge Test. An evaluation which is used to determine whether the learner has attained certain information-learning objectives required to perform a task correctly and safely.

Learning Activities. Specific activities which are designed to guide the learner to achievement of a stated enabling objective. Learning activities tell the learner what to do and when.

Open-Entry. Allows students to enter vocational programs at specified times other than the traditional entry time at semesters which is the normal entry time used in public education.

Open-Exit. Provides a plan for leaving the vocational program at the time the students complete the desired training, instead of requiring students to wait for a group graduation date.

Performance Objective. A statement of exactly what the learner must do in observable and measurable terms. A performance objective is the same as a behavioral objective and contains three parts.

1. Conditions: "Given"
   Describes the situation, limits, tools, and equipment of the work environment.

2. Performance: "You Will"
   States exactly what observable behavior the learner must demonstrate.

3. Standard: "How Well"
   Described how much is required or how precise the quality of work must be.

Performance Standards. The criteria that the learner must meet in order to reach attainment of the task at the entry-level of the occupation.

Performance Test. Performance standards which are used to determine whether the learner has attained a certain task. A performance test directs the learner to perform the skills of the task and to perform them under the working conditions of the occupation.

Prerequisite Tasks. Skills or knowledge that must be learned before another task can be attained.

Program. An occupational title given to a collection of duties and tasks constituting the total work assignment of a single group of workers performing essentially the same type of work/or having the same job title.

Program Task Listing. A list of tasks considered to be essential for a worker to perform on an entry-level position in the occupation for which training is being received. These tasks are numbered and grouped by duty areas on the listing. Each duty area can be recognized by a letter A-Z assigned in front of the name of the duty. The Program Task Listing also includes State DVE Program Numbers, as well as a column with Standard Hours identified for each task.

Resources. Software and hardware which are needed by the learner to complete the learning guide. This includes: instructional materials as well as equipment used in actual performance of the task.

Self-Check. A device or method which provides for prompt learner feed-back to determine whether or not the enabling objective was reached. A self-check is a means of giving a learner a chance to check the knowledge or the skill they have exercised in the process of attaining the enabling objective.

Standard Hours. Standard hours represent the standard number of hours of credit given for each task in a task listing. Standard hours are based on the average time spent by former students attaining a task, not hours of attendance of an individual student working on a task.

Student Learning Guides. A well-defined set of directions for students to follow in attaining the desired task. The student learning guide includes objectives, learning activities, titles of resources, and a performance test. A learning guide is written for each task identified in the program's task listing.

Task. A specific work activity at the entry-level of the occupation which defines what the worker does. A task usually generates a product or an observable change in the work environment. It has a definite beginning and ending point.

Task Listing. A comprehensive list of duties and tasks performed by workers in an occupation.

## Limitations

The following were considered as limitations of the study:

1. The extent that student awareness of their part in the study effected student performance.
2. The inability to control the teacher variable in carrying out the design.
3. The possibility that participant (instructors and students) mortality might threaten the validity of the study.
4. The unavailability of the same resources listed in each of the RVTC Student Learning Guides in every school. This limitation required the use of other tests and audio visuals by some of the participants.
5. The inability to control the reading proficiency levels of students participating in the study.

## Delimitations

This study was delimited to:

1. Selected area vocational-technical centers, community colleges and high schools rather than a random selection.
2. Students enrolled second semester of the school year 1981-82.
3. Thirty-seven vocational instructors.

# II

# REVIEW OF LITERATURE

A review of the literature revealed numerous studies and reports dealing with development of CBVE curricula and other studies of field-testing efforts. The literature summarized in this chapter is categorized into three sections: (1) development of CBVE curricula, (2) field-testing efforts, and (3) change agents for innovations in education.

## Development of CBVE Curricula

As instructors train students in the tasks directly related to the responsibilities of workers on the job, the key to achieving CBVE is the individualization of instruction according to Johnson, Harrington and Fagin (1976). Florida has been doing a number of things that makes the teacher's job in individualizing instruction easier. In 1976 a set of guidelines entitled Delivering Competency - Based Vocational Education (Harrington, 1976) were published. The guidelines were presented for setting goals and performance objectives, designing learning experiences and developing criterion-referenced tests, solving motivational and behavioral problems and evaluating and managing individualized instruction.

Florida also participates in the Vocational-Technical Education Consortium of States (V-TECS) effort of developing catalogs with occupational objectives related to job tasks. The DVE has funded numerous projects related to development of CBVE curricula produced by the Center for Studies in Vocational Education (CSVE) including materials in nursery operations, automotive mechanics, and employability skills. The Vocational Instructional Materials Acquisition System (VIMAS), a seven component system, was established in 1976 as an alternative to the centralized development approach for acquiring instructional materials. VIMAS reviews and recommends existing materials for statewide use in CBVE programs (Massey and Kromhout, 1981).

Through the State's university system, Florida has also been actively involved in Competency-Based Teacher Education (CBTE) thus ensuring that future teachers will have the benefit of training needed to offer individualized instruction in CBVE programs (Andreyka, 1976).

In 1973, the organization of Teacher Education Centers (TEC) by the Florida Legislature provided for inservice and staff development to update teaching skills for those instructors already employed in school districts. Therefore, a vehicle was established to present CBVE to teachers working in the profession.

Florida is also participating in a consortium to develop students achievement measures for several programs. The consortium is known as Student Occupational Competency-Achievement Testing (SOCAT) and is part of a national testing institution.

In addition, Florida's annual vocational educator's summer workshops have devoted a great deal of time to CBVE. In 1975, the Eighth Annual Vocational Educator's Workshop was completely devoted to

CBVE topics. "The Florida Vocational Journal," produced by the CSVE, has also published many articles on CBVE.

Other states have studied and adopted competency-based education. At a national conference in 1975, it was reported that 23 states had produced documents addressing competency-based education or certification at that time (Pittman, 1975). Minnesota is recognized for the support that State has given to CBVE. Planners from Minnesota considered the following goals as they prepared for the construction of a new area vocational-technical center in 1970: (a) open entry for students, (b) access to training programs for the handicapped and disadvantaged, (c) articulation between secondary and post-secondary curricula, and (d) efficiency and accountability. The 916 Area Vo-Tech Institute opened in September 1972, totally committed to a competency-based, open-entry/open-exit, personalized, self-paced learning system (Knaak, 1977).

According to McNeil, one of the four major curriculum categories studied in the curriculum field is "technological," and this perspective has re-emerged in the competency-testing movement and public demands for accountability. Technology has a plan for the systematic use of various teaching methods and media in the learning process and a sequencing of instruction based on principles from behavioral science. The systems and products used obtain the same results on repeated occasions. Technology is found in procedures for the development and evaluation of curriculum materials and instructional systems. Technologists view their function as finding efficient and effective means to predetermined ends. One use of technology as a solution to more effective instruction is known as the "personalized system of instruction (PSI)." This system is a soft technology involving persons, content, materials, equipment, and organizations as opposed to a hard technology, which involved ONLY devices such as television, computers, and projects, etc. PSI utilizes the behavioral science principles that call for frequent responses from students, immediate knowledge of results, and a clear statement of objectives. It also allows for individualization; different students may use different amounts of time and different approaches for attaining mastery of the instructional tasks (McNeil, 1981).

Early in the planning stages for RVTC, the Director and others made a commitment to implementing CBVE with an open-entry/open-exit policy throughout the center (Andreyka and Parmer, 1980). The goal was to establish programs based on verified job competencies and to provide individualized instruction that would enable students to attain these job competencies. The instructors were to be referred to as learning managers, and they were to guide students through the learning process using resources listed in "packets" called student learning guides. First-draft copies of CBVE student learning guides have been developed in the eighteen programs offered at RVTC (Andreyka and Parmer, 1981). With only one format to follow in developing the student learning guides, the entire staff at RVTC is able to work efficiently with the instructors in all programs as students' outcomes are maximized (Blank and Parmer, 1980).

In individualizing CBVE, the design and development of learning experiences must be based primarily on the characteristics of the student and the task to be taught according to Harrington and Huckaby (1977). By varying kind of activities, selecting media, materials, and strategies, the instructors can achieve individualization for all learners.

Jacobs (1980) reminds us that CBVE is not new. It is a progressive instructional system that is here to stay. It has been used by the military and is recognized by many vocational educators as the best means of increasing efficiency and effectiveness of programs while at the same time providing for greater accountability.

## Field-Testing Efforts

In the field test, curriculum is implemented under conditions as close as possible to those that will be in existence when the curriculum is implemented on a regular basis. According to Pratt (1980), a field test is like a dress rehearsal of a program. Special administrative approval and teacher cooperation are required for the field test. The field test should allow participants to try the process without substantial fear of failure (Clark and Guba, 1967). With administrative approval and support, the success of the field test should result in the interest of other instructors and students. The interest generated helps build support for the new intervention. Written evaluation questionnaires and open-ended comments allow for participants to express their feelings about the curriculum materials.

According to Scriven, Tyler, and Gagne (1967), when evaluation is conducted on past activities or outcomes, it is usually being conducted for the purpose of justification or accountability. This is known as summative evaluation. But when evaluation is focused on current efforts for purpose of program improvement, they identify this as formative evaluation. The process of field-testing is recognized as the third step in formative evaluation. The first step in formative evaluation is between one student and the instructor and the second step is small group evaluation (Dick and Carey, 1978).

McNeil (1981) writes that currently there is a return to recognizing teachers as theorists and researchers in their own right. He reflects on the usefulness of the work accomplished by action researchers of the 1950s among whom were Gordon MacKenzie, Stephen Corey, and Hilda Taba. They were curriculum specialists who involved teachers in the research process. Taba's work was the basis and model followed in the development of the Florida's Approach to Competency-Based Individualized Teaching (FACIT) materials (Johnson, Harrington, and Fagin, 1974-76). Based on research, instructors who participated in field-testing the first-draft RVTC Student Learning Guides were given the opportunity to draw on their experience and knowledge in recommending suggestions for revision to the RVTC curricula as they field-tested the guides.

Missouri's State Department of Education funded a project initiating a competency-based welding program which was field-tested in five vocational schools in 1980 (Evans, 1980). These materials were used with special needs students who were mainstreamed in the vocational schools to demonstrate the ability of competency-based instruction as a teaching technique. The evaluation forms that were used in this project and the final report were reviewed closely for adaptations to the Field-Testing RVTC Student Learning Guides Project.

The State Department of Education in Tennessee sponsored a project in July, 1979, "The Development and Testing of Adult Vocational Programs Utilizing the Adult Performance Level Competency Approach," (Tennessee, 1979). However, the modules developed were in adult functional literacy skills needed to seek and retain employment, and not for training in vocational programs as RVTC developed.

Kentucky has developed individualized modules in certain vocational program areas and field-tested these in Kentucky schools. Their final report (Bruce, 1975) was reviewed for strategies in managing the field testing of RVTG Student Learning Guides as well as for adaptation of evaluation forms for the project.

The packet of forms used in Florida's Instructional Materials Assessment Survey, a component of VIMAS (Kromhout, 1978), were reviewed, as well as, the various feedback forms used by the CSVE. The National Center for Research in Vocational Education has developed several field-test feedback forms that were also reviewed (Hamilton, 1981).

## Change Agents

Rand completed a "Change Agent Study" in 1977 (Berman and McLaughlin). The first phase of the study dealt with factors affecting the initiation and implementation of local "Change Agent" Projects. The second part of the study examined the institutional and project factors that influenced the continuation of innovations after special funding was terminated.

The study identified four clusters of factors as crucial to the successful implementation and continuation of local change efforts: (a) institutional motivation, (b) project implementation strategies, (c) institutional leadership and (d) teacher characteristics.

Three teacher's attributes -- years of experience, verbal ability and sense of efficacy -- has strong and significant but very different effects on most of the project outcomes. Berman and McLaughlin (1977) found instructors very effective as change agents.

Resistance in social systems and barriers in educational institutions appear to have five main sources: (a) absence of motivation for change, (b) vulnerability, (c) inadequate resources, (d) lack of clarity about the innovation and (e) skepticism (Pratt, 1980).

The Stages of Concern about the Innovation is a result of extensive research led by Hall (1973, 1977) including study of individuals involved in "change" in educational institutions. The seven stages identified are:

a. awareness
b. informational
c. personal
d. management
e. consequences
f. collaboration
g. refocusing.

According to Hall, interventions can facilitate change, but in the end, each individual determines whether or not change will occur. Attending to concerns is important and was considered in the field testing of CBVE materials from RVTC.

The review of the literature provided the background for developing procedures and evaluation instruments used in the study. Implications were also found for instructors to serve as change agents in implementing innovations in education.

# III

# METHODOLOGY AND ACCOMPLISHMENTS OF PROJECT OBJECTIVES

## Formative Evaluation

The review of the literature has directed attention to the importance of "formative evaluation." The emphasis in formative evaluation is on the collection of data so that instructional materials may be revised during the developmental stages, thus making the materials as effective as possible.

According to Dick and Carey (1978) the first stage of formative evaluation consists of clinical evaluation with one student and an instructor evaluating the materials. The second stage is small group evaluation, representative of the target population. These two evaluations were completed by RVTC instructors during the school years of 1979-81 for the six programs field-tested in this study (Andreyka, 1980-81). In the final or third stage of the formative evaluation, learning materials were field-tested in a target learning situation at field-test sites in all five of the Florida vocational education regions for the six selected Ridge programs.

## Project Staff

The Project Director was assigned to the field testing project on a 9 months, 25 percent of time basis. The Director was assisted by a Project Coordinator who was appointed on a 12 months, 50 percent of time basis. The Project Staff included a part-time secretary. The Project Director has also directed the Demonstration Site activities at RVTC since 1979, during the years of development of the curricular materials being field tested.

Consultants expenses, requested in the budget, covered payment to the six RVTC instructors instructing the programs to be field-tested. The RVTC instructors were consulted by the field-test participants during the workshops and throughout the project year as the student learning guides were field-tested across the State.

## Procedures and Results

Eight project objectives (tasks) were identified to accomplish the field-testing goal. Each of the objectives are presented with a description of the procedures and results of the task.

### Task 1: Develop field-test evaluation instruments:

The investigation of designs used by other researchers to present, synthesize, and analyze data from field-testing curricular materials was reported in the Review of the Literature. Based upon the review, field-test evaluation forms (Appendix A,B) were developed and printed. Copies of the first-draft RVTC Student Learning Guides for the six programs to be field-tested were printed by the DVE. (See Appendix C for an example of a RVTC Student Learning Guide.)

### Task 2: Select schools and instructors in the five vocational education regions to field-test CBVE student learning guides from six

programs developed at RVTC, (Clerical, Cosmetology, Heavy Truck/Bus Mechanics, Industrial Electricity, Masonry and Welding).

In the selection of test sites, suggestions were obtained from regional consultants and DVE staff. To be selected, the institutions had to be offering the programs to be field-tested and the administrators needed to be committed to CBVE. From the suggestions received, twenty sites in Florida were selected from secondary schools, community colleges, and area vocational-technical centers to test the six programs.

A preliminary letter of invitation was sent to the twenty superintendents of schools districts and presidents of the community colleges selected explaining the project's objectives and requesting permission to work with identified programs. A copy of the letter was sent to the local school's principal, director, or dean and also to the regional consultant whose program would be included in the project (Appendix D).

After receiving permission from the superintendents and community college presidents, a follow-up letter was mailed inviting administrators at each of the field-testing sites to participate in the third stage of the formative evaluation (See Appendix E for copy of sample letter and list of participants). The local administrators were asked to identify one volunteer instructor for each program that would be field-tested in the school. The number of institutions involved in each region varied. The number of instructors participating in the project was limited to 37, with instructor representation from the five regions comprising the sample population (See Table 1).

TABLE 1

FIELD TESTING COMPETENCY-BASED VOCATIONAL EDUCATION STUDENT LEARNING GUIDES DEVELOPED AT RIDGE VOCATIONAL-TECHNICAL CENTER

| INSTRUCTOR PARTICIPANTS IN SECONDARY SCHOOLS, COMMUNITY COLLEGES AND AREA VOCATIONAL-TECHNICAL CENTERS | Secondary Schools | Community Colleges | Area Vo-Tech Centers | TOTAL |
|---|---|---|---|---|
| Cosmetology | -0- | 2 | 5 | 7 |
| Clerical Occupations | 1 | 1 | 3 | 5 |
| Heavy Truck/Bus Mechanics | 1 | 0 | 3 | 4 |
| Industrial Electricity | -0- | 1 | 4 | 5 |
| Masonry | 2 | 1 | 2 | 5 |
| Welding | 1 | 5 | 5 | 11 |
| TOTALS | 5 | 10 | 22 | 37 |

Westside Skills, Jacksonville, counted as Secondary and Brewster Skills Center, Tampa, included with Area Vo-Tech Centers.

Three different models for field-testing were followed. These models were identified as: Pre-Service, Decentralized, and On-Site Field Testing.

The Decentralized Model consist of the welding instructors who participated in a VIMAS Project DVE 1-2G21. In the VIMAS project instructors developed student learning guides for a welding program using the CBVE Student Learning Guides from RVTC as their primary input. The field testing results for the welding instructors who were part of this writing effort are shown as the Decentralized Model in this project.

The Preservice Model is made up of the cosmetology instructors involved in the field testing project who were previously selected to attend a week-long "CBVE Awareness Workshop" held at RVTC in June, 1981. The results of their field testing efforts are shown in the Products Section of the Final Report.

The On-Site field testing Model is comprised of the instructors recommended to the Project Staff for field testing activities. They attended a two-day orientation workshop at RVTC just prior to field-testing the Ridge CBVE Student Learning Guides.

Task 3: Plan and conduct a two-day CBVE orientation workshop at RVTC for the instructor participants.

The project staff planned a two-day CBVE orientation workshop at RVTC for the instructors participating in the field-testing project.

The workshop was held December 1 and 2, 1981, and was conducted by the project staff and members of the RVTC staff. Instructor's Personal Data Forms (Appendix F) were completed by the participants. Time was also scheduled for the participants to work with the RVTC instructors in the program areas being field-tested (Appendix G). The participants received three copies of each first-draft RVTC Student Learning Guide to be field-tested in their program areas at the field-test site during second semester 81-82. They also received copies of the Program Task Listing which was to be verified by local advisory committees. The DVE was fiscally responsible for printing student learning guides required for the field test rather than the project staff. Procedures for student orientation to CBVE and guidelines for the field-testing process were discussed during the orientation workshop (Appendix H). Another orientation workshop, January 19 and 20, 1982, was necessary for participants who could not attend in December. The same agenda was followed (Appendix I). These workshops and a later exit workshop were funded by the Staff Development Section (DVE). Written evaluations were obtained for all workshops (see Appendix J and N).

Task 4: Verify task listings from field-test programs utilizing local program advisory committees at the field-test sites.

Participants were instructed to compare the RVTC program task listing to their program's task listing or course outlines. (See copies of RVTC Task Listings for the six programs being field tested in the Products Section of Final Report). Differences were then discussed with local program advisory committees to determine if changes should be made to the RVTC Program Task Listings. These suggested changes were examined at the exit workshop will all instructor participants in May, 1982.

Task 5: Adopt and adapt selected first-draft RVTC Student Learning Guides to local criteria and resources available in the field-test programs.

After reviewing all the first-draft RVTC Student Learning Guides in their program, participants identified student learning guides that could be field-tested as written with individual students. They were then instructed in adapting procedures for those guides selected to field-test, but where they did not have the resources which were identified in the student learning activities. This required the field-test teachers listing additional resources in the student learning guides that they used as the same tasks were taught in the traditional approach.

Task 6: Field-test selected first-draft RVTC Student Learning Guides from the six programs in each of the five vocational education regions of the State.

Formative evaluation by students and instructors for use in the revision process was the main purpose of the field test. Students were to use the individualized materials and complete evaluation forms addressing each part of the student learning guide. They identified difficult words in the instructions and the learning resources materials. The instructors monitored progress and evaluated the student's competency attained on the RVTC performance tests.

After obtaining a field test evaluation form from all the students assigned to a particular task, the instructor then completed an evaluation form. This evaluation was based on the instructor's review of each student learning guide and the students' evaluations and comments written as they used that particular Student Learning Guide.

Field testing the first-draft of RVTC Student Learning Guides provided suggestions for revision of the materials and was a practical means of furnishing CBVE materials to twenty schools throughout the State. Field testing the RVTC curricula also appeared to encourage these schools to use this approach to instruction. Additionally, by field testing the guides, instructors functioned as change agents and may be the force needed to move entire schools to implementing open-entry, open-exit CBVE.

### Task 7: Analyze field-test results and suggestions for revisions.

At the end of the field-test year, an exit workshop was held May 17 and 18, 1982 (Appendix K). The workshop was located at the Court of Flags Resort and Conference Hotel, Orlando, Florida. The participants discussed the support received for CBVE and the field testing project from their administration, co-workers, and students (Appendix L). They also suggested revisions to the current procedures used in the field testing project (Appendix M).

An evaluation of the exit workshop was conducted (Appendix N) as well as an evaluation of the project (Appendix O). Certificates were presented to the participants (Appendix P) and materials and evaluations collected.

Task 8: Recommend A Model for Field Testing Materials.

Tables are included in the Products Section of the report showing the number of student learning guides field-tested by each instructor. These tables allow a comparison of the On-Site field-test model with two other field-testing models used with RVTC curricula -- Decentralized (Welding) and Pre-Service (Cosmetology).

# IV

# RECOMMENDATIONS

The Project Staff offers the following recommendations:

## Selection of Test Sites

Based on recommendations from the instructor participants, additional effort will be made to locate programs to field-test in 82-83 that are using the same textbooks, audio visuals, and resources listed in the RVTC Student Learning Guides. This will cut down on the participant's time required in adapting student learning guides to other resources and allow more time for the actual field testing with students in the limited project time available.

## Field Test Four Programs

The Project Staff recommends reducing the number of programs being field-tested during 82-83 from six to four programs. It is also recommended that the number of schools involved be held to a minimum due to limited project staff and funding for travel if the current level of funding is maintained.

## Orientation Workshop

The instructor participants appeared to encounter some professional "jealousy" from multiple instructor programs. It is recommended that the one instructor attending the orientation workshop explain the procedures to the other members of the school's department and involve all teachers in the same program in the field-testing.

## Workshop for Administrators

The Project Staff recommends that an administrators workshop, including the administrators of the field test participants, be held to familiarize them with the project's objectives and with procedures for implementing CBVE. Responses from the field test participants indicated that administrators varied in their support of CBVE. It is also recommended that one on-site administrator be responsible for progress in the field-testing effort.

### Additional Project to Synthesize Suggested Revisions

It is recommended for 82-83 that a VIMAS Project support the synthesizing of revisions deemed necessary after the field test of 81-82. Only the revised student learning guides will then be reviewed before materials are forwarded to DVE for dissimination.

### Continued Field-Testing of Materials

The Project Staff recommends that after revisions are incorporated into the first-draft RVTC Student Learning Guides, that the first year be looked at as a continuation of the field testing rather than a summative evaluation. After the 81-82 field test, it was found that some of the guides had an insufficient number of evaluations completed by students and instructors.

### Teacher's Guides

It is the recommendation of the Project Staff that a teacher's guide be developed for each of the field-test programs being revised for printing. The guide will present some general information about CBVE and specific information related to the program's materials and how to use the student learning guides.

### Technical Assistance

There was a need for more contact with the participants throughout the project year by the Project Staff, but the level of funding would not allow the desired number of visits. Technical assistance is needed in establishing CBVE programs that goes beyond the field-testing role. Therefore, follow-up is needed to assist in this effort.

### Word Processing

It is recommended that all revised RVTC Student Learning Guides be stored on word processing equipment. This will allow pages to be quickly retrieved for instant editing. The time spent compiling, updating, and preparing the guides for production could be significantly reduced.

### Forms

The Project Staff recommends revising the Student Learning Guide Evaluation Instruments requiring a mix of negative as well as positive responses. In retrospect, the present evaluation instruments may be construed as "bias" because they encourage all "yes" responses. It is recommended that student evaluations in each program by synthesized by the instructor on one form for each student learning guide field-tested. To expediate processing, answer sheets that can be machine-scored should be used for evaluations by instructor participants.

### RVTC Original Writers

The Project Staff recommends that the RVTC instructors continue to be involved in the revision process up until dissemination by the DVE. The field test data for each student learning guide will be independently reviewed by the RVTC instructor as well as the Project Staff. Every effort will be made to incorporate the recommendations of the field-test participants in the revision process.

### University Course Credit

The Project Staff recommends that university course credit be given to participants who complete established criteria during the months of field testing. This staff development provision may be used by the field testing instructors in a number of ways for professional development. See Appendix Q for USF Course Numbers and Requirements for the 1981-82 participants.

### Field Test "Models"

As a result of the field testing, and a comparison of the three models, the On-Site Field-Test Model is recommended for field testing other RVTC programs. The phases of this model include: a two-day orientation workshop, two field-test site visits, and a two-day exit workshop. There are some differences in percentage of student learning guides (SLG) tested and the average number of students per learning guide tested using these procedures and this model over the other two models (Table 2). However, the cost makes the On-Site Model most feasible. The cost for a week-long awareness workshop such as the Pre-Service Model for each program to be field tested is precluded. The Decentralized Model required instructors to travel to RVTC several times during the project year for writing sessions. The expense for conducting these sessions with groups of instructors for each program to field tested prevents this model's recommendation. The On-Site Model

F

allows for some interaction between program instructors attending orientation and exit workshops with the technical assistance provided by the project staff during the field testing months. Travel for the project staff is much more economical as they visit schools field testing multiple programs than the expense would be if all the instructors were required to travel many times during the project year.

Table 2

Model Comparison

| Model | SLG Available | SLG Tested | %SLG Tested | AVG. No. Student/SLG |
|---|---|---|---|---|
| On-Site | 355 | 269 | 75 | 6.0 |
| Pre-Service | 42 | 326 | 86 | 9.1 |
| Decentralized | 63 | 218 | 74 | 4.6 |

## V

## PRODUCT DESCRIPTIONS

The primary products for this project were the suggested revisions for RVTC Student Learning Guides obtained through evaluation and field-testing by students and instructors. Table 3 summarizes the percentage of student learning guides (SLG) tested in the six RVTC programs and the average number of student subjects per guide.

Table 3

Percent of Field-Tested Student Learning Guides

| Program | SLG Available | SLG Tested | %SLG Tested | Avg. No. Students/SLG |
|---|---|---|---|---|
| Clerical | 62 | 51 | 82 | 5.3 |
| Cosmetology | 42 | 36 | 86 | 9.1 |
| Ind. Elec. | 52 | 44 | 85 | 10.0 |
| Heavy Truck/Bus | 116 | 68 | 59 | 3.8 |
| Masonry | 62 | 60 | 97 | 7.8 |
| Welding | 63 | 55 | 87 | 7.0 |

Tables 4 to 10 detail these products by field-test models and program areas. Appendix R shows the titles for each task number listed in these tables for the six field-tested programs.

## TABLE 4

On-Site Field-Test Model Production (Clerical)

| | Helen D. Croswell Thomas Haney Vo-Tech | | Shirley Rogers Westside Vocational Skills | | Evelyn V. Milewski Daytona Beach Community College | | Della Escobio Brewster Skills Center | | Frances Robinson South Tech Ed Center | | Totals | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Task Number | T | S | T | S | T | S | T | S | T | S | T | S |
| FR- 01 | 1 | 4 | | | 1 | 3 | | | | | 2 | 7 |
| 02 | | | | | 1 | 2 | | | | | 1 | 2 |
| TW- 04 | 1 | 5 | | | | | | | | | 1 | 5 |
| CW- 05 | 1 | 3 | 1 | 3 | | | 1 | 2 | 1 | 1 | 4 | 9 |
| 06 | 1 | 3 | 1 | 3 | | | 1 | 2 | | | 3 | 3 |
| 07 | | | 1 | 3 | | | 1 | 1 | | | 2 | 4 |
| 08 | | | | | | | 1 | 1 | 1 | 2 | 2 | 3 |
| 09 | | | 1 | 3 | | | 1 | 2 | 1 | 2 | 3 | 7 |
| 10 | | | 1 | 3 | 1 | 4 | 1 | 3 | 1 | 1 | 4 | 11 |
| 11 | 1 | 3 | 1 | 3 | | | 1 | 1 | | | 3 | 7 |
| OS- 01 | | | 1 | 3 | | | 1 | 2 | | | 2 | 5 |
| TW- 05 | 1 | 4 | | | 1 | 3 | | | | | 2 | 7 |
| 06 | | | | | 1 | 3 | | | | | 1 | 3 |
| 07 | | | | | 1 | 3 | | | | | 1 | 3 |
| MC- 06 | | | 1 | 3 | | | | | 1 | 1 | 2 | 4 |
| 07 | | | 1 | 3 | | | | | | | 1 | 3 |
| 08 | | | 1 | 3 | | | | | | | 1 | 3 |
| 09 | 1 | 2 | 1 | 3 | | | | | | | 2 | 5 |
| 10 | 1 | 3 | | | | | | | | | 1 | 3 |
| 11 | 1 | 2 | 1 | 3 | | | 1 | 2 | | | 3 | 7 |
| 12 | | | 1 | 3 | | | 1 | 2 | 1 | 1 | 3 | 6 |
| AC- 01 | 1 | 3 | | | | | 1 | 1 | 1 | | 3 | 4 |
| 02 | | | | | | | 1 | 1 | | | 1 | 1 |
| 03 | 1 | 2 | | | | | 1 | 1 | | | 2 | 3 |
| 10 | 1 | 3 | | | | | 1 | 3 | | | 2 | 6 |
| OR- 01 | | | | | | | | | | | | |
| 02 | | | | | | | | | | | | |
| 03 | | | | | | | | | | | | |
| 04 | | | | | | | | | | | | |
| OB- 01 | 1 | 3 | | | | | | | | | 1 | 3 |
| 02 | | | | | | | | | | | | |
| CO- 01 | | | | | | | | | | | | |
| 02 | 1 | 3 | | | | | | | 1 | 1 | 2 | 4 |
| 03 | | | | | | | | | | | | |
| CW- 01 | | | 1 | 3 | 1 | 3 | | | 1 | 2 | 3 | 8 |
| 02 | | | 1 | 3 | 1 | 3 | 1 | 3 | 1 | 1 | 4 | 10 |
| 03 | 1 | 3 | 1 | 3 | 1 | 7 | 1 | 4 | 1 | 1 | 5 | 18 |
| 04 | | | 1 | 3 | | | 1 | 1 | 1 | 2 | 3 | 6 |
| TW- 01 | | | | | 1 | 3 | | | 1 | 3 | 2 | 6 |
| 02 | | | | | 1 | 3 | | | | | 1 | 3 |
| 03 | | | | | 1 | 3 | | | | | 1 | 3 |

T = Number of instructor evaluation forms completed by teachers
S = Number of evaluations completed by students

TABLE 4 cont.

| Task Number | Helen D. Croswell<br>Thomas Haney Vo-Tech T | Helen D. Croswell<br>Thomas Haney Vo-Tech S | Shirley Rogers<br>Westside Vocational Skills T | Shirley Rogers<br>Westside Vocational Skills S | Evelyn V. Milewski<br>Daytona Beach Community College T | Evelyn V. Milewski<br>Daytona Beach Community College S | Della Escobio<br>Brewster Skills Center T | Della Escobio<br>Brewster Skills Center S | Frances Robinson<br>South Tech Ed Center T | Frances Robinson<br>South Tech Ed Center S | Totals T | Totals S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MC- 01 | | | 1 | 3 | | | | | 1 | 2 | 2 | 5 |
| 02 | | | 1 | 3 | | | | | | | 1 | 3 |
| 03 | | | 1 | 3 | | | | | 1 | 1 | 2 | 4 |
| 04 | 1 | 2 | | | | | | | 1 | 2 | 2 | 4 |
| 05 | | | 1 | 3 | | | | | | | 1 | 3 |
| DP- 01 | | | | | | | 1 | 1 | 1 | 2 | 2 | 3 |
| 02 | | | | | | | 1 | 2 | 1 | 2 | 2 | 4 |
| MA- 01 | | | | | 1 | 3 | 1 | 1 | 1 | 2 | 3 | 6 |
| 02 | 1 | 4 | | | | | 1 | 1 | 1 | 2 | 3 | 7 |
| OS | | | | | | | | | | | | |
| 02 | | | | | | | | | | | | |
| RE- 01 | | | 1 | 3 | 1 | 3 | 1 | 3 | 1 | 1 | 4 | 10 |
| 02 | | | 1 | 3 | 1 | 3 | 1 | 2 | | | 3 | 8 |
| 03 | 1 | 2 | | | 1 | 3 | 1 | 1 | | | 3 | 6 |
| MT- 01 | | | | | | | | | | | | |
| 02 | | | | | | | | | | | | |
| CW | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | |
| DS | | | | | | | | | | | | |
| 03 | | | | | | | | | | | | |
| DA- 01 | 1 | 2 | 1 | 3 | | | | | | | 2 | 5 |
| 02 | 1 | 2 | | | | | | | | | 1 | 2 |
| 03 | | | | | | | | | | | | |
| 04 | | | 1 | 3 | 1 | 3 | | | | | 2 | 6 |
| 05 | | | | | 1 | 3 | | | | | 1 | 3 |
| 06 | | | | | 1 | 3 | | | | | 1 | 3 |
| TOTALS | 20 | 58 | 25 | 75 | 19 | 61 | 24 | 43 | 21 | 32 | 109 | 269 |

T = Number of instructor evaluation forms completed by teachers

S = Number of evaluations completed by students

## TABLE 5

### On-Site Field-Test Model Production (Heavy Truck/Bus)

| | Charles A. Streit, Jr. George Stone Area Vocational Center | | Bill White Westside Skills Center | | John R. Oldfield Pinellas Vocational-Technical Center | | Dayle L. Frantsen Rovert Morgan Vo-Tech Center | | Totals | |
|---|---|---|---|---|---|---|---|---|---|---|
| Task Number | T | S | T | S | T | S | T | S | T | S |
| A- 01 | | | 1 | 1 | | | | | 1 | 1 |
| 02 | | | 1 | 1 | | | | | 1 | 1 |
| 03 | 1 | 2 | 1 | 1 | | | | | 2 | 4 |
| 04 | | | 1 | 1 | | | | | 1 | 1 |
| 05 | | | 1 | 1 | | | | | 1 | 1 |
| 06 | 1 | 3 | 1 | 1 | 1 | 3 | 1 | | 4 | 7 |
| 07 | | | 1 | 1 | 1 | 3 | | | 2 | 4 |
| 08 | 1 | 3 | 1 | 1 | 1 | 3 | 1 | 1 | 4 | 8 |
| 09 | | | 1 | 1 | | | | | 1 | 1 |
| 10 | 1 | 3 | 1 | 1 | | | | | 2 | 4 |
| 11 | | | | | | | | | | |
| 12 | | | | | | | | | | |
| 13 | | | | | | | | | | |
| 14 | | | | | | | | | | |
| B- 01 | 1 | 3 | 1 | 1 | 1 | 3 | 1 | 1 | 4 | 8 |
| 02 | | | 1 | 1 | 1 | 3 | | | 2 | 4 |
| 03 | | | 1 | 1 | 1 | 3 | | | 2 | 4 |
| 04 | | | 1 | 1 | 1 | 3 | | | 2 | 4 |
| 05 | | | 1 | 1 | 1 | 3 | | | 2 | 4 |
| 06 | | | 1 | 1 | | | | | 1 | 1 |
| 07 | | | | | | | | | | |
| 08 | 1 | 3 | | | 1 | 3 | 1 | 3 | 3 | 9 |
| 09 | 1 | 3 | | | | | | | 1 | 3 |
| 10 | | | 1 | 1 | 1 | 3 | | | 2 | 4 |
| 11 | | | | | | | | | | |
| 12 | | | 1 | 1 | | | | | 1 | 1 |
| C- 01 | 1 | 3 | 1 | 1 | 1 | 3 | | | 3 | 7 |
| 02 | 1 | 3 | | | 1 | 3 | | | 2 | 6 |
| 03 | | | 1 | 1 | 1 | 2 | | | 2 | 3 |
| 04 | 1 | 3 | 1 | 1 | | | | | 2 | 4 |
| 05 | | | 1 | 1 | 1 | 3 | 1 | 4 | 3 | 8 |
| 06 | | | | | 1 | 3 | 1 | 1 | 2 | 4 |
| 07 | | | | | | | | | | |
| 08 | | | | | 1 | 3 | 1 | 3 | 2 | 6 |
| 09 | | | | | | | | | | |
| 10 | | | | | 1 | 3 | | | 1 | 3 |
| D- 01 | 1 | 3 | | 1 | | | | | 1 | 4 |
| 02 | | | | 1 | | | | | | 1 |
| 03 | | | | 1 | | | | | | 1 |
| 04 | | | | 1 | | | | | | 1 |
| 05 | 1 | 3 | | | | | | | 1 | 3 |
| 06 | 1 | 3 | | 1 | | | | | 1 | 4 |
| 07 | | | | 1 | | | | | | 1 |
| 08 | | | | | | | | | | |
| 09 | | | | | | | | | | |
| E- 01 | 1 | 3 | | 1 | | | | | 1 | 4 |
| 02 | 1 | 3 | | 1 | | | | | 1 | 4 |
| 03 | | | | | | | | | | |
| 04 | | | | | 1 | 3 | | | 1 | 3 |
| 05 | | | | | 1 | 3 | 1 | 2 | 2 | 5 |
| 06 | | | | | 1 | 3 | | | 1 | 3 |
| 07 | | | | | | | 1 | 2 | 1 | 2 |

T = Number of instructor evaluation forms completed by teachers
S = Number of evaluations completed by students

TABLE 5 cont.

| | Charles A. Streit, Jr. George Stone Area Vocational Center | | Bill White Westside Skills Center | | John R. Oldfield Pinellas Vocational-Technical Center | | Dayle L. Frantsen Robert Morgan Vo-Tech Center | | Totals | |
|---|---|---|---|---|---|---|---|---|---|---|
| Task Number | T | S | T | S | T | S | T | S | T | S |
| F- 01 | 1 | 3 | | 1 | | | | | 1 | 4 |
| 02 | | | | 1 | | | | | | 1 |
| 03 | | | | | | | | | | |
| 04 | | | | | | | | | | |
| 05 | 1 | 3 | | | | | | | 1 | 3 |
| 06 | | | | | 1 | 3 | 1 | 2 | 2 | 5 |
| 07 | 1 | 3 | | | 1 | 3 | | | 2 | 5 |
| 08 | | | | | | | | | | |
| G- 01 | 1 | 3 | | | 1 | 3 | | | 2 | 6 |
| 02 | | | | | 1 | 3 | | | 1 | 3 |
| 03 | | | | | 1 | 3 | | | 1 | 3 |
| 04 | | | | | 1 | 3 | 1 | 2 | 2 | 5 |
| 05 | | | | | | | | | | |
| 06 | | | | | | | | | | |
| 07 | | | | | | | | | | |
| 08 | | | | | | | | | | |
| 09 | | | | | | | | | | |
| 10 | | | | | | | | | | |
| H- 01 | | | | | | | | | | |
| 02 | | | | | | | | | | |
| 03 | | | | | | | | | | |
| 04 | | | | | | | | | | |
| 05 | 1 | 3 | | | 1 | 3 | | | 2 | 6 |
| 06 | 1 | 3 | | | 1 | 3 | 1 | 6 | 3 | 12 |
| I- 01 | 1 | 3 | | 1 | 1 | 3 | | | 2 | 7 |
| 02 | 1 | 3 | | | 1 | 3 | | | 2 | 5 |
| 03 | | | | | 1 | 3 | | | 1 | 3 |
| 04 | | | | | | | | | | |
| 05 | 1 | 3 | | | 1 | 3 | | | 2 | 6 |
| 06 | 1 | 3 | | | | | | | 1 | 3 |
| 07 | | | | | 1 | 3 | | | 1 | 3 |
| 08 | | | | | | | | | | |
| 09 | | | | | | | | | | |
| 10 | | | | | 1 | 3 | | | 1 | 3 |
| 11 | | | | | | | | | | |
| 12 | | | | | 1 | 3 | | | 1 | 3 |
| 13 | | | | | 1 | 3 | | | 1 | 3 |
| 14 | | | | | | | | | | |
| J- 01 | | | | | | | | | | |
| 02 | | | | | | | | | | |
| 03 | | | | | | | | | | |
| 04 | | | | | | | | | | |
| 05 | | | | | | | | | | |
| 06 | | | | | | | | | | |
| 07 | | | | | | | | | | |
| 08 | | | | | | | | | | |
| 09 | 1 | 3 | | | | | | | 1 | 3 |
| 10 | | | | | 1 | 3 | 1 | 2 | 2 | 5 |
| 11 | | | | | | | | | | |
| 12 | | | | | | | | | | |
| 13 | | | | | | | | | | |
| 14 | | | | | 1 | 3 | | | 1 | 3 |

T = Number of instructor evaluation forms completed by teachers
S = Number of evaluations completed by students

TABLE 5 cont.

| | Charles A. Streiff, Jr. George Stone Area Vocational Center | | Bill White Westside Skills Center | | John R. Oldfield Pinellas Vocational-Technical Center | | Doyle L. Frantsen Robert Morgan Vo-Tech Center | | Totals | |
|---|---|---|---|---|---|---|---|---|---|---|
| Task Number | T | S | T | S | T | S | T | S | T | S |
| 15 | | | | | 1 | 3 | | | 1 | 3 |
| 16 | | | | | | | | | | |
| 17 | | | | | | | | | | |
| 18 | | | | | | | | | | |
| 19 | | | | | | | | | | |
| 20 | | | | | | | | | | |
| 21 | | | | | | | | | | |
| K- 01 | | | | 1 | | | | | | 1 |
| 02 | | | | 1 | | | | | | 1 |
| 03 | | | | | | | | | | |
| 04 | | | | | | | | | | |
| 05 | | | | | | | | | | |
| 06 | | | | | | | | | | |
| 07 | | | | | | | | | | |
| TOTALS | 26 | 78 | 22 | 35 | 39 | 116 | 13 | 29 | 100 | 258 |

T = Number of instructor evaluation forms completed by teachers
S = Number of evaluations completed by students

## TABLE 6

On-Site Field-Test Model Production (Industrial Electricity)

| | Bruce L. Wallace George Stone Area Vocational Center | | John E. Gentry Santa Fe Community College | | Dan Varnes Wichlacoochee Vo-Tech Center | | Otto Toepfer Polk Vocational Technical Center | | Leonard Eisenberg South Tech Ed Center | | Totals | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Task Number | T | S | T | S | T | S | T | S | T | S | T | S |
| A- 01 | | | | | | | | | | | | |
| 02 | | 2 | 1 | 15 | | 3 | | | | | 1 | 20 |
| 03 | | | | | | | | | | | | |
| B- 01 | | | 1 | 14 | | 3 | | | 1 | 3 | 2 | 20 |
| 02 | | | 1 | 14 | | 3 | 1 | 3 | 1 | 4 | 3 | 24 |
| 03 | | | 1 | 14 | | 3 | 1 | 3 | 1 | 4 | 3 | 24 |
| 04 | | | 1 | 7 | | 3 | 1 | 1 | | | 2 | 11 |
| 05 | | | 1 | 10 | | 3 | | | 1 | [illegible] | 2 | 19 |
| 06 | | | 1 | 14 | | 3 | 1 | 1 | 1 | 5 | 3 | 23 |
| 07 | | | 1 | 9 | | 3 | | | 1 | 5 | 2 | 17 |
| 08 | | | 1 | 7 | | 3 | | | 1 | 4 | 2 | 14 |
| 09 | | | 1 | 8 | | 3 | | | | | 1 | 11 |
| 10 | | | 1 | 7 | | | | | | | 1 | 7 |
| 11 | | | 1 | 8 | | 3 | | | | | 1 | 11 |
| 12 | | | 1 | 7 | | | | | | | 1 | 7 |
| 13 | | | 1 | 7 | | 3 | | | | | 1 | 10 |
| 14 | | | 1 | 6 | | | | | | | 1 | 6 |
| 15 | | | 1 | 5 | | | | | | | 1 | 5 |
| 16 | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | |
| 19 | | 2 | | 3 | | | 1 | 2 | | | 1 | 7 |
| 20 | | 4 | | 3 | | | | | | | | 7 |
| 21 | | 2 | | 9 | | | 1 | 2 | | | 1 | 13 |
| 22 | | 3 | | 7 | | | 1 | 1 | | | 1 | 11 |
| 23 | | 2 | | 4 | | | | | | | | 6 |
| 24 | | 2 | | 3 | | | | | | | | 5 |
| 25 | | 2 | | 1 | | | | | | | | 3 |
| 26 | | 2 | | 1 | | | | | | | | 3 |
| 27 | | 2 | | | | | | | | | | 2 |
| 28 | | 2 | | | | | | | | | | 2 |
| 29 | | 2 | | | | | | | | | | 2 |
| 30 | | 2 | | | | | | | | | | 2 |
| C- 01 | | 1 | | 3 | | 3 | | | 1 | 2 | 1 | 9 |
| 02 | | 2 | | | | | | | | | | 2 |
| 03 | | 3 | | 2 | | 3 | | | 1 | 3 | 1 | 11 |
| 04 | | 3 | | 5 | | 3 | | | 1 | 4 | 1 | 15 |
| 05 | | 3 | | 2 | | 3 | | | 1 | 4 | 1 | 12 |
| 06 | | 3 | | 1 | | 3 | | | 1 | 3 | 1 | 10 |
| 07 | | 3 | | 3 | | 3 | | | | 1 | | 10 |
| 08 | | 3 | | 3 | | 3 | | | | 3 | | 12 |
| 09 | | 3 | | 3 | | 2 | | | 1 | 2 | 1 | 10 |
| 10 | | 3 | | 3 | | 2 | | | 1 | 3 | 1 | 11 |
| 11 | | 3 | | 3 | | 2 | | | 1 | 3 | 1 | 11 |
| 12 | | 1 | | | | 2 | | | 1 | 1 | 1 | 4 |
| 13 | | 1 | | | | 2 | | | | | | 3 |
| 14 | | 2 | | 6 | | 2 | | | 1 | 2 | 1 | 12 |
| 15 | | 1 | | 1 | | 2 | | | 1 | 3 | 1 | 7 |
| 16 | | | | | | | | | 1 | 4 | 1 | 4 |
| 17 | | | | | | 2 | | | 1 | 2 | 1 | 4 |
| D- 01 | | | | | | 2 | | | | | | 2 |
| 02 | | 2 | | | | | | | | | | 2 |
| E- 01 | | | | | | | | | | | | . |
| 02 | | | | | | | | | | | | |
| TOTALS | | 56 | 15 | 213 | | 75 | 7 | 13 | 20 | 30 | 13 | 382 |

T = Number of instructor evaluation forms completed by teachers
S = Number of evaluations completed by students

## TABLE 7

On-Site Field-Test Model Production (Masonry)

| Task Number | Isaac Lenon<br>George Stone<br>Vocational Center |  | Tom Ryan<br>Santa Fe Community<br>College |  | George Clark<br>Lake County Area<br>Vo-Tech |  | Carl E. Coats<br>Leto High School |  | Robert F. Quider<br>Dillard High School |  | Totals |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | T | S | T | S | T | S | T | S | T | S | T | S |
| A- 01 |  |  |  |  |  |  |  |  |  |  |  |  |
| 02 |  |  |  |  |  |  |  |  |  |  |  |  |
| 03 | 1 | 4 | 1 |  |  |  | 1 | 3 | 1 | 8 | 4 | 15 |
| 04 | 1 | 3 | 1 | 5 |  |  | 1 | 4 | 1 | 12 | 4 | 24 |
| 05 | 1 | 4 |  |  |  |  | 1 | 3 | 1 | 2 | 3 | 9 |
| B- 01 | 1 | 4 | 1 | 7 |  |  | 1 | 3 | 1 | 9 | 4 | 23 |
| 02 | 1 | 4 |  |  |  |  | 1 | 3 |  |  | 2 | 7 |
| 03 | 1 | 4 |  |  |  |  |  |  | 1 | 13 | 2 | 17 |
| 04 | 1 | 4 | 1 | 4 |  |  | 1 | 3 | 1 | 7 | 4 | 18 |
| 05 | 1 | 3 |  | 4 |  |  | 1 | 3 | 1 | 13 | 3 | 23 |
| 06 | 1 | 4 |  | 5 |  |  |  |  | 1 | 7 | 2 | 16 |
| 07 |  | 4 |  | 2 | 1 | 3 | 1 | 3 | 1 | 1 | 3 | 13 |
| 08 | 1 | 4 |  | 2 |  |  | 1 | 3 |  |  | 2 | 9 |
| 09 | 1 | 4 |  | 6 |  |  | 1 | 3 |  |  | 2 | 13 |
| 10 |  | 4 |  |  |  |  |  |  |  |  |  | 4 |
| 11 |  | 4 |  | 4 |  |  |  |  | 1 | 1 | 1 | 9 |
| 12 |  | 4 |  |  |  |  |  |  |  |  |  | 4 |
| 13 |  | 3 |  |  | 1 | 2 |  |  | 1 | 1 | 2 | 6 |
| 14 |  | 4 |  |  |  |  | 1 | 3 | 1 | 6 | 2 | 13 |
| C- 01 |  | 4 |  |  |  |  | 1 | 4 | 1 | 7 | 2 | 15 |
| 02 |  | 4 |  | 2 |  |  | 1 | 3 |  |  | 1 | 9 |
| 03 |  | 2 |  | 1 | 1 | 3 | 1 | 4 | 1 | 5 | 3 | 15 |
| 04 |  | 2 |  |  |  |  | 1 | 3 |  |  | 1 | 5 |
| 05 |  | 2 |  | 1 |  |  |  |  |  |  |  | 3 |
| 06 |  | 3 |  |  |  |  | 1 | 4 |  |  | 1 | 7 |
| 07 |  | 3 |  |  |  |  | 1 | 3 | 1 | 2 | 2 | 8 |
| 08 |  | 3 |  |  |  |  | 1 | 3 |  |  | 1 | 6 |
| 09 |  | 4 |  | 1 |  |  | 1 | 3 | 1 | 5 | 2 | 13 |
| 10 |  | 2 |  | 3 |  |  |  |  | 1 | 4 | 1 | 9 |
| 11 |  | 2 |  |  |  |  |  |  | 1 | 3 | 1 | 5 |
| 12 |  | 2 |  |  |  |  | 1 | 3 | 1 | 5 | 2 | 10 |
| 13 |  | 2 |  |  |  |  |  |  | 1 | 1 | 1 | 3 |
| 14 |  | 2 |  | 1 |  |  |  |  | 1 | 2 | 1 | 5 |
| 15 |  | 2 |  |  |  |  |  |  |  |  |  | 2 |
| 16 |  | 2 |  |  |  |  |  |  |  |  |  | 2 |
| 17 |  | 4 |  |  |  |  |  |  |  |  |  | 4 |
| 18 |  |  |  |  |  |  | 1 | 3 |  |  | 1 | 3 |
| 19 |  | 2 |  |  |  |  |  |  |  |  |  | 2 |
| 20 |  | 2 |  |  |  |  |  |  |  |  |  | 2 |
| 21 |  | 2 |  |  |  |  |  |  |  |  |  | 2 |
| 22 |  | 1 |  |  |  |  |  |  |  |  |  | 1 |
| 23 |  | 2 |  |  |  |  |  |  |  |  |  | 2 |
| 24 |  | 1 |  |  |  |  | 1 | 3 |  |  | 1 | 4 |
| D- 01 |  | 2 |  | 1 |  |  |  |  | 1 | 8 | 1 | 11 |
| 02 |  | 2 |  | 1 | 1 | 2 |  |  | 1 | 4 | 2 | 9 |
| 03 |  | 3 |  |  |  |  |  |  |  |  |  | 3 |
| 04 |  | 2 |  |  | 1 | 2 | 1 | 3 | 1 | 9 | 3 | 16 |
| 05 |  | 2 |  |  |  |  | 1 | 3 | 1 | 1 | 2 | 6 |
| 06 |  | 3 |  |  |  |  |  |  | 1 | 5 | 1 | 8 |
| 07 |  |  |  |  |  |  |  |  | 1 | 6 | 1 | 6 |
| 08 |  | 2 |  |  |  |  |  |  |  |  |  | 2 |
| 09 |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 |  | 1 |  |  |  |  |  |  |  |  |  | 1 |
| 11 |  | 1 |  |  |  |  |  |  |  |  |  | 1 |

T = Number of instructor evaluation forms completed by teachers
S = Number of evaluations completed by students

TABLE 7 cont.

| | Isaac Lenon<br>George Stone<br>Vocational Center | | Tom Ryan<br>Santa Fe Community<br>College | | George Clark<br>Lake County Area<br>Vo-Tech | | Carl E. Coats<br>Leto High School | | Robert F. Quider<br>Dillard High School | | Totals | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Task Number | T | S | T | S | T | S | T | S | T | S | T | S |
| 12 | | 3 | | | | | 1 | 4 | 1 | 5 | 2 | 12 |
| 13 | | 3 | | | | | 1 | 3 | 1 | 6 | 2 | 12 |
| 14 | | 1 | | | | | | | 1 | 6 | 1 | 7 |
| 15 | | | | | | | | | | | | |
| 16 | | | | | | | | | 1 | 4 | 1 | 4 |
| E- 01 | | 3 | | | | | | | | | | 3 |
| 02 | | 1 | | | | | | | | | | 1 |
| 03 | | 3 | | | | | | | | | | 3 |
| 04 | | 3 | | | | | | | | | | 3 |
| 05 | | 2 | | | | | | | | | | 2 |
| TOTALS | 11 | 157 | 4 | 50 | 5 | 12 | 26 | 83 | 31 | 168 | 77 | 470 |

T = Number of instructor evaluation forms completed by teachers
S = Number of evaluations completed by students

## TABLE 8

On-Site Field Test Model Production (Welding)

| Task Number | Bill Mielke Haney Vo-Tech Center | | Rushie Dixon Westside Skills Center | | Royce Moore Santa Fe Community College | | William Moore Brewster Skills Center | | James L. Brantley Robert Morgan Vo-Tech Center | | Totals | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | T | S | T | S | T | S | T | S | T | S | T | S |
| A- 01 | | | | | | | | | | | | |
| 02 | | | | | | | | | | | | |
| 03 | 1 | | | | | | | | 1 | 2 | 2 | 2 |
| 04 | 1 | 3 | | | | | | | 1 | 2 | 2 | 4 |
| B- 01 | 1 | 3 | | | | | | | | | 1 | 3 |
| 02 | 1 | 3 | | | | | | | | | 1 | 3 |
| 03 | | | | | | | | | | | | |
| C- 01 | | | | | | | | | | | | |
| 02 | | | | | | | | | | | | |
| 03 | | | | | | | | | | | | |
| D- 01 | | | | | | | 1 | 2 | | | 1 | 2 |
| 02 | | | | | | | 1 | 1 | | | 1 | 1 |
| 03 | | | | | | | 1 | 1 | | | 1 | 1 |
| E- 01 | | | | | | | | | 1 | 2 | 1 | 2 |
| 02 | | | | | | | | | | | | |
| 03 | | | | | | | | | | | | |
| 04 | | | | | | | | | 1 | 1 | 1 | 1 |
| 05 | | | | | | | | | | | | |
| 06 | | | | | | | | | | | | |
| 07 | | | | | | | | | | | | |
| 08 | | | | | | | | | | | | |
| F- 01 | 1 | 3 | 1 | 6 | | | | | 1 | | 3 | 9 |
| 02 | | | | | | | | | | | | |
| 03 | | | 1 | 6 | | | | | 1 | 1 | 2 | 7 |
| 04 | | | | | | | | | | | | |
| 05 | | | | | | | | | | | | |
| 06 | | | | | | | | | | | | |
| 07 | | | | | | | | | | | | |
| 08 | | | | | | | | | 1 | 2 | 1 | 2 |
| 09 | 1 | 3 | | | | | | | | | 1 | 3 |
| G- 01 | 1 | 3 | 1 | 6 | | | 1 | 1 | | 2 | 3 | 12 |
| 02 | 1 | 3 | 1 | 5 | | | 1 | 1 | | 2 | 3 | 11 |
| 03 | 1 | 1 | 1 | 3 | | | 1 | 1 | | | 3 | 5 |
| 04 | 1 | 3 | 1 | 4 | | | 1 | 1 | | | 3 | 8 |
| 05 | | | 1 | 4 | | | 1 | 2 | | | 2 | 6 |
| 06 | | | 1 | 4 | | | | | | | 1 | 4 |
| 07 | | | 1 | 4 | | | | | | | 1 | 4 |
| 08 | | | 1 | 4 | | | | | | | 1 | 4 |
| 09 | | | 1 | 4 | | | | | | | 1 | 4 |
| 10 | 1 | 1 | 1 | 3 | | | | | | | 2 | 4 |
| 11 | | | 1 | 3 | | | | | | | 1 | 3 |
| 12 | 1 | 3 | | | | | 1 | 3 | | | 2 | 6 |
| 13 | | | 1 | 3 | | | | | | | 1 | 3 |
| 14 | | | 1 | 3 | | | | | | | 1 | 3 |
| 15 | | | 1 | 3 | | | | | 1 | | 2 | 3 |
| 16 | 1 | 3 | 1 | 3 | | | 1 | 2 | | | 3 | 8 |
| 17 | | | 1 | 3 | | | | | | | 1 | 3 |
| 18 | | | 1 | 4 | | | | | | | 1 | 4 |
| 19 | | | 1 | 4 | | | 1 | 1 | | | 2 | 5 |
| 20 | | | 1 | 4 | | | 1 | 2 | | | 2 | 6 |
| 21 | | | | | | | | | | | | |

T = Number of instructor evaluation forms completed by teachers
S = Number of evaluations completed by students

TABLE 8 cont.

| Task Number | Bill Mielke Haney Vo-Tech Center | | Rushie Dixon Westside Skills Center | | Royce Moore Santa Fe Community College | | William Moore Brewster Skills Center | | James L. Brantley Robert Morgan Vo-Tech Center | | Totals | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | T | S | T | S | T | S | T | S | T | S | T | S |
| H- 01 | 1 | 3 | | | | | 1 | 2 | | | 2 | 5 |
| 02 | 1 | 3 | | | | | 1 | 1 | | 1 | 2 | 5 |
| 03 | | | | | | | 1 | 1 | | | 1 | 1 |
| 04 | | | | | | | | 1 | | | | 1 |
| 05 | 1 | 3 | | | | | | 1 | | | 1 | 4 |
| 06 | 1 | 3 | | | | | | 1 | | | 1 | 4 |
| 07 | | | | | | | | 1 | | | | 1 |
| 08 | | | | | | | | | | | | |
| I- 01 | | | | | | | 1 | 1 | | | 1 | 1 |
| 02 | | | | | | | 1 | 1 | | | 1 | 1 |
| J- 01 | | | | | | | | | | | | |
| 02 | | | | | | | | | | | | |
| TOTALS | 17 | 44 | 21 | 83 | | | 17 | 28 | 8 | 14 | 63 | 169 |

T = Number of instructor evaluation forms completed by teachers
S = Number of evaluations completed by students

# TABLE 9

Pre-Service Field-Test
Model Production
(Cosmetology)

| | Peggy Register<br>Chipola Junior College | | Myrtice B. Flora<br>Haney Voc-Tech Center | | Jo Daniels<br>Lively Area Vocational | | Betty L. Holloway *<br>Lake County Area Vo-Tech | | Orle R. Nelson<br>Santa Fe Community College | | Betty Yates<br>Lee Vo-Tech | | Sara E. Pilgrim<br>Robert Morgan Vo-Tech | | Totals | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Task Number | T | S | T | S | T | S | T | S | T | S | T | S | T | S | T | S |
| A- 01 | 1 | | 1 | 2 | | | | | | | | | | | 2 | 2 |
| 02 | 1 | 2 | | | | | | | | | | | | | 1 | 2 |
| 03 | 1 | 2 | 1 | 2 | | | | | | | | | | | 2 | 4 |
| 04 | | | 1 | 4 | | | | | | | | | | | 1 | 4 |
| 05 | | | | | | | 1 | 1 | 1 | 3 | 1 | | | | 3 | 4 |
| B- 01 | 1 | 2 | 1 | 3 | 1 | 3 | 1 | 3 | 1 | 3 | 1 | 4 | | | 5 | 18 |
| 02 | 1 | 1 | 1 | 8 | 1 | 3 | 1 | 2 | 1 | 3 | 1 | 3 | | | 6 | 20 |
| C- 01 | | 1 | 1 | 8 | 1 | 3 | 1 | 3 | 1 | 3 | 1 | 3 | | | 5 | 21 |
| 02 | 1 | 1 | 1 | 2 | 1 | 3 | 1 | 1 | 1 | 3 | 1 | 2 | | | 5 | 12 |
| 03 | 1 | 5 | 1 | 6 | 1 | 3 | 1 | 1 | 1 | 3 | 1 | | | | 6 | 13 |
| 04 | | | | | 1 | 3 | | | 1 | 3 | 1 | 3 | | | 3 | 9 |
| 05 | | | | | | | | | | | | | | | | |
| 06 | | | | | | | | | | | | | | | | |
| D- 01 | | | | | 1 | 3 | | | 1 | 3 | 1 | 5 | 1 | 4 | 4 | 15 |
| 02 | | 1 | 1 | 5 | 1 | 3 | | | | | 1 | 2 | 1 | 4 | 4 | 15 |
| 03 | | | | 4 | 1 | 3 | | | | | | | 1 | 4 | 2 | 11 |
| 04 | | | | 3 | | | | | | | | | | | | 3 |
| E- 01 | | 1 | 1 | 4 | | | | | 1 | 3 | 1 | 1 | 1 | 1 | 4 | 10 |
| 02 | | | 1 | 4 | | | | | 1 | 3 | 1 | 3 | | | 3 | 10 |
| 03 | | | | | | | | | 1 | 3 | 1 | 2 | | | 2 | 5 |
| 04 | | | | 1 | | | | | 1 | 3 | 1 | 2 | | | 2 | 6 |
| 05 | | | 1 | | | | | | 1 | 3 | 1 | 2 | | | 3 | 5 |
| 06 | | | 1 | 4 | | | 1 | 1 | 1 | 3 | | | | | 3 | 3 |
| 07 | | | | | | | | | | | | | | | | |
| F- 01 | | 1 | 1 | 5 | 1 | 3 | 1 | 3 | 1 | 3 | 1 | 1 | 1 | 5 | 6 | 21 |
| 02 | | 1 | 1 | 2 | | | 1 | 3 | 1 | 3 | 1 | 1 | | | 4 | 10 |
| 03 | | | | | | | | | | | | | | | | |
| 04 | | | | | | | | | | | | | | | | |
| G- 01 | 1 | | 1 | 3 | 1 | 3 | 1 | 2 | | | 1 | 2 | 1 | 5 | 5 | 15 |
| 02 | | | 1 | 4 | 1 | 3 | 1 | 3 | | | 1 | 2 | | | 4 | 12 |
| 03 | | | 1 | 3 | 1 | 3 | | | | | 1 | 2 | | | 3 | 8 |
| 04 | 1 | | 1 | 3 | 1 | 3 | 1 | 4 | | | 1 | 2 | | | 5 | 12 |
| 05 | 1 | | 1 | 2 | 1 | 3 | | | | | 1 | 1 | | | 4 | 6 |
| 06 | | | | | | | | | | | | | | | | |
| H- 01 | | | 1 | 5 | 1 | 3 | 1 | 3 | 1 | 3 | | | | | 4 | 14 |
| 02 | | | 1 | 3 | 1 | 3 | 1 | 3 | 1 | 3 | | | | | 4 | 12 |
| 03 | | | | | | | | | | | | | | | | |
| 04 | | | | | | | | | | | | | | | | |
| 05 | | | | | | | | | | | | | | | | |
| 06 | | | | | | | | | | | | | | | | |
| I- 01 | | | | | 1 | 3 | | | | | 1 | 3 | | | 2 | 6 |
| 02 | | | | | | | | | | | 1 | 1 | | | 1 | 1 |
| J- 01 | | | | | | | 1 | 3 | | | | | | | 1 | 3 |
| 02 | | | | | | | 1 | 1 | | | | | | | 1 | 1 |
| TOTALS | 10 | 18 | 22 | 90 | 18 | 54 | 16 | 37 | 18 | 54 | 23 | 47 | 6 | 23 | 113 | 323 |

* Not a member of the original Pre-Service Group; Added for representation in Region III

T = Number of instructor evaluation forms completed by teachers
S = Number of evaluations completed by students

## TABLE 10

Decentralized Field-Test Model Production (Welding)

| Task Number | Joe Jarreau Mid-Florida Technical Institute |  | John H. Wolfram Daytona Beach Community College |  | George Gaich Brevard Community College |  | Joe Hoffman St. Petersburg Vo-Tech Institute |  | Totals |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  | T | S | T | S | T | S | T | S | T | S |
| A- 01 |  |  |  |  |  | 3 |  |  |  | 3 |
| 02 |  |  |  |  |  |  | 1 |  | 1 |  |
| 03 |  |  | 1 | 3 |  | 1 | 1 | 7 | 2 | 11 |
| 04 |  |  |  |  |  |  | 1 | 1 | 1 | 1 |
| B- 01 |  |  |  |  | 1 |  |  |  | 1 |  |
| 02 |  |  |  |  |  |  |  |  |  |  |
| 03 |  |  |  |  |  |  |  |  |  |  |
| C- 01 |  |  | 1 | 3 |  | 8 |  |  | 1 | 11 |
| 02 |  |  | 1 | 3 |  | 1 |  |  | 1 | 4 |
| 03 |  |  | 1 | 2 |  | 1 |  |  | 1 | 3 |
| D- 01 |  |  |  |  |  | 3 |  |  |  | 3 |
| 02 |  |  |  |  |  |  |  |  |  |  |
| 03 |  |  |  |  |  |  |  |  |  |  |
| E- 01 | 1 | 1 |  |  |  | 13 |  |  | 1 | 14 |
| 02 | 1 | 1 |  |  |  |  |  |  | 1 | 1 |
| 03 | 1 | 1 |  |  |  |  |  |  | 1 | 1 |
| 04 | 1 | 1 |  |  |  |  |  |  | 1 | 1 |
| 05 |  |  |  |  |  |  |  |  |  |  |
| 06 |  |  |  |  |  |  |  |  |  |  |
| 07 |  |  |  |  |  |  |  |  |  |  |
| 08 |  |  |  |  |  |  |  |  |  |  |
| F- 01 | 1 | 1 |  |  |  | 3 |  |  | 1 | 4 |
| 02 | 1 | 1 |  |  |  |  | 1 | 5 | 2 | 7 |
| 03 | 1 |  |  |  |  |  | 1 | 5 | 2 | 5 |
| 04 | 1 | 1 |  |  |  |  |  |  | 1 | 1 |
| 05 | 1 | 1 |  |  |  |  | 1 | 5 | 2 | 7 |
| 06 | 1 | 1 |  |  |  |  |  |  | 1 | 1 |
| 07 | 1 | 1 |  |  |  | 1 |  |  | 1 | 2 |
| 08 | 1 | 1 |  |  |  |  |  | 1 | 1 | 2 |
| 09 | 1 | 1 |  |  |  |  |  |  | 1 | 1 |
| G- 01 |  |  | 1 | 3 |  | 1 | 1 |  | 2 | 4 |
| 02 |  |  | 1 | 3 |  | 1 |  | 7 | 1 | 11 |
| 03 |  |  | 1 | 3 |  | 3 |  |  | 1 | 6 |
| 04 |  |  | 1 | 3 |  | 1 | 1 | 5 | 2 | 10 |
| 05 |  |  | 1 | 3 |  |  |  |  | 1 | 3 |
| 06 |  |  | 1 | 3 |  |  |  |  | 1 | 3 |
| 07 |  |  | 1 | 3 |  | 1 |  |  | 1 | 4 |
| 08 |  |  | 1 | 3 |  | 1 |  |  | 1 | 4 |
| 09 |  |  | 1 | 3 |  |  |  |  | 1 | 3 |
| 10 |  |  | 1 | 3 |  | 1 |  |  | 1 | 4 |
| 11 |  |  | 1 | 3 |  | 1 |  |  | 1 | 4 |
| 12 |  |  | 1 | 3 |  | 1 | 1 | 5 | 2 | 10 |
| 13 |  |  | 1 | 3 |  |  |  |  | 1 | 3 |
| 14 |  |  | 1 | 3 |  | 2 |  |  | 1 | 5 |
| 15 |  |  | 1 | 3 |  | 1 | 1 | 5 | 2 | [illegible] |
| 16 |  |  | 1 | 3 |  |  | 1 | 5 | 2 | [illegible] |
| 17 |  |  | 1 | 3 |  | 1 | 1 | 4 | 2 | 8 |
| 18 |  |  | 1 | 3 |  |  | 1 | 4 | 2 | 8 |
| 19 | 1 | 1 | 1 | 3 |  | 2 |  |  | 2 | 6 |
| 20 |  |  | 1 | 3 |  | 1 |  |  | 1 | 4 |
| 21 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

T = Number of instructor evaluation forms completed by teachers
S = Number of evaluations completed by students

TABLE 10 cont.

| | Joe Jarreau Mid-Florida Technical Institute | | John H. Wolfram Daytona Beach Community College | | George Gatch Brevard Community College | | Joe Hoffman St. Petersburg Vo-Tech Institute | | Totals | |
|---|---|---|---|---|---|---|---|---|---|---|
| Task Number | T | S | T | S | T | S | T | S | T | S |
| H- 01 | | | | | | 1 | | | | 1 |
| 02 | | | | | | 1 | | | | 1 |
| 03 | | | | | | | | | | |
| 04 | | | | | | | | | | |
| 05 | | | | | | 2 | | | | 2 |
| 06 | | | | | | 3 | | | | 3 |
| 07 | | | | | | | | | | |
| 09 | | | | | | 1 | | | | 1 |
| I- 01 | | | | | | | | | | |
| 02 | | | | | | | | | | |
| J- 01 | | | | | | | | | | |
| 02 | | | | | | | | | | |
| TOTALS | 14 | 13 | 24 | 72 | 1 | 69 | 13 | 64 | 52 | 218 |

T = Number of instructor evaluation forms completed by teachers
S = Number of evaluations completed by students

## VI

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# VII

# APPENDICES

# APPENDIX A

## Student Evaluation of Learning Guide Form

Do Not Write in This Space

______________________

STUDENT EVALUATION OF LEARNING GUIDE FORM

INSTRUCTIONS TO THE STUDENT: Please complete a separate form for each learning guide field-tested. Keep an accurate record of the hours you spend on each guide. Please do your best to answer the questions so that we can improve these materials. Thank you!!

______________________
Duty (Letter) Task (Number)
Learning Guide Number Being Evaluated

______________________ ______________________
Student's Name (Please print) Program

______________________
School Name

Date started on Learning Guide ______________________

Date Learning Guide was completed ______________________

**Total clock hours spent on Learning Guide ______________

**Don't include the time spent in completing this evaluation form.

______________________
Student's Signature

---

Attained competency on Performance Test: ____ YES ____ NO

First attempt: ____ YES ____ NO

______________________
Instructor's Signature

Instructor's Remarks: Remember to comment on the "NO's" circled by the student and to check for circled words that were difficult for the student throughout the Learning Guide.

1. What did you like most about this Learning Guide?

2. What did you like least about this Learning Guide?

3. What should be changed in this Learning Guide?

Circle either YES, NO, or NA (Not Applicable) for each of the following statements.

4. The introduction indicated to me why this Learning Guide was important and its purpose. YES NO NA

5. I understood each of the objectives and knew what was expected of me before I began completing the Learning Guide. YES NO NA

6. The learning steps or activities were written so they were were easy to understand and follow. YES NO NA

7. Instruction sheets contained important data not found elsewhere in the other resources. YES NO NA

8. The illustrations provided in the Learning Guide were helpful in explaining the material. YES NO NA

9. The audiovisual resources helped me understand the content. YES NO NA

10. Additional audiovisuals need to be included as a resource in this Learning Guide. YES NO NA

11. New words were defined throughout the Learning Guide or resources. YES NO NA

12. The level of reading in the Learning Guide was difficult. YES NO NA

13. The level of reading found in the resources listed in the learning steps or activities was difficult. YES NO NA

14. The self-checks were helpful. YES NO NA

15. I was aware of my progress as I proceeded through the Learning Guide. YES NO NA

16. Opportunities to apply or practice what I had learned were provided. YES NO NA

17. The instructor was available for assistance when needed. YES NO NA

18. The Knowledge Test was based on material covered in the learning steps or activities. YES NO NA

19. The Performance Test measured my attainment of the task. YES NO NA

20. This Learning Guide and the activities prepared me for the Performance Test. YES NO NA

# APPENDIX B

## Instructor Evaluation of Learning Guide Form

## INSTRUCTOR'S EVALUATION OF THE STUDENT LEARNING GUIDE

________________________________
Duty (Letter) Task (Number)
Learning Guide Number Being Field-Tested

________________________________
Instructor's Name (Please Print)

________________________________
School Name

Program: Check one.

_____A. Clerical Occupations
_____B. Cosmetology
_____C. Heavy Duty Truck Bus Mechanics
_____D. Industrial Electricity
_____E. Masonry
_____F. Welding

INSTRUCTIONS TO THE EVALUATOR: Please complete a separate form and staple to the cover sheet for each learning guide field-tested. Throughout the learning guide pages, handwrite your comments and suggestions for revisions; then, respond to the following questions.

1. What did you like most about this learning guide?

2. What did you like least about this learning guide?

3. What should be changed in this learning guide?

4. How does performance of students using this learning guide compare to your students who have received other methods of instruction?

Circle either Yes, No, or NA (Not applicable) in response to each of the following questions.

5. Did the introduction give you a good overview of the purpose of this learning guide? Yes No NA

6. Are the objectives well-developed stating clearly what performance is required for attainment of task, the conditions the student must perform under, and the specific criteria by which attainment will be determined? Yes No NA

7. Is this task representative of the needs of the occupational area? Yes No NA

8. Are the learning steps or activities written so they are easy to understand and follow? Yes No NA

9. Do the learning steps or activities lead to the attainment of the task stated in the objectives? Yes No NA

10. Were the instruction sheets helpful in providing information important to attainment of the task not covered elsewhere in the resources? Yes No NA

11. Do the illustrations help explain the written information? Yes No NA

12. Did you notice any bias within the learning guide (ethnic, sexual, racial, etc.)? Yes No NA

13. Do the self-checks assess the learner's progress toward the objectives? Yes No NA

14. Are opportunities for practice provided in a job-like setting? Yes No NA

15. Are new words defined and used consistently throughout the learning guide and resources? Yes No NA

16. Is the reading level of the learning guide appropriate? Yes No NA

17. Is the level of reading in the resources suitable? Yes No NA

18. Is the use of audiovisuals adequate for this learning guide? Yes No NA

19. Was the length of instruction presented in this learning guide about right? Yes No NA

20. Were items in the Knowledge Test appropriate and based on information presented in the learning steps or activities? Yes No NA

21. Does the Performance Test measure attainment of the task? Yes No NA

22. Did you respond to the "no" items circled on the Student's Evaluation of the Learning Guide Form? Yes No NA

23. Are difficult words circled within the learning guide along with your handwritten suggestions for revisions? Yes No NA

# APPENDIX C

## Example of RVTC Student Learning Guide

# STUDENT LEARNING GUIDE

RIDGE
VOCATIONAL-
TECHNICAL
CENTER
7700 State Road 544
Winter Haven, FL 33880

**PROGRAM:** INDUSTRIAL ELECTRICITY

**DUTY:** B ACQUIRING FUNDAMENTALS OF ELECTRICITY

**TASK:** 0 4 Analyze DC Circuits With a Volt-Ohm-Milliammeter

## INTRODUCTION:

It is often necessary to read voltage and amperage in order to test for trouble in electrical systems. This Learning Guide will assist you in using a volt-ohm-milliammeter to analyze DC circuits.

DUTY B
TASK 04
PREREQ.
DEPT. IN
PROG. 9273
REVISED 5/29/81

**PLEASE DO NOT WRITE IN LEARNING GUIDE.**

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# FLORIDA'S DEMONSTRATION SITE for COMPETENCY-BASED VOCATIONAL EDUCATION

**PROJECT STAFF:**
DR. ROBERT E. ANDREYKA, Project Director and
Professor, University of South Florida

LISA BEVERLY, Curriculum Specialist
WILMA McCARTY, Curriculum Specialist

This student learning guide was prepared by William H. Lewis, Industrial Electricity Instructor, and the Demonstration Site Project Staff.

**Ridge Vocational-Technical Center**
**7700 State Road 544**
**Winter Haven, FL 33880**

**Bill Hampton, Director**

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# OBJECTIVES

DUTY B
TASK 04
DEPT. IN
PROG. 9273

## PERFORMANCE OBJECTIVE:

(Include condition, performance, and standard)

**GIVEN:** access to a power supply board and volt-ohm-milliammeter (VOM),

**YOU WILL:** analyze DC circuits with a volt-ohm-milliammeter.

**HOW WELL:** You must successfully complete the Knowledge Test.

Your performance will be assessed by your instructor using the Performance Standards on page 9.

## ENABLING OBJECTIVES:

1. Set up a VOM.
2. Practice analyzing DC circuits with a volt-ohm-milliammeter.

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## **LEARNING ACTIVITIES** FOR ENABLING OBJECTIVE 1 number **RVTC**

DUTY B
TASK 04
EN. OBJ. 1
DEPT. IN
PROG. 9273

Enabling objective:

Set up a VOM.

**PROCEDURE**

| LEARNING ACTIVITIES | RESOURCES |
|---|---|
| 1. Use Resource No. 1 to identify a VOM and its use. | 1. Sound-on-Slide: "Electrical Troubleshooting with a VOM"<br>or<br>Text: DC Fundamentals, Unit 11, pages 117 - 128. |
| 2. View Resource No. 2 which illustrates how to read a meter. | 2. Sound-on-Slide: "Meter Readers", Part I and II. |
| 3. Evaluate your knowledge using the Self-Check. | 3. Self-Check enclosed. |
| 4. When you think you can attain this task, take the Knowledge Test. | 4. Knowledge Test for task B-04. |
| 5. Go on to Enabling Objective No. 2. | |

## **SELF-CHECK** FOR ENABLING OBJECTIVE 1 number

**RVTC**

DUTY B | TASK 04 | EN. OBJ. 1 | DEPT. IN | PROG. 9273

**DIRECTIONS:** Evaluate your knowledge by answering True or False to the items below on a separate sheet of paper.

1. Meter readings are most accurate in the middle of the scale.
2. A megohmmeter is used for insulation testing.
3. An ammeter is always placed across or in parallel with a circuit under testing.
4. Polarity of test leads is not important when using a VOM.
5. When measuring an unknown voltage, start with the meter in the highest voltage range.

Now check your answers with the Answer Key.

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## **SELF-CHECK** FOR ENABLING OBJECTIVE 1 number

**RVTC**

## ANSWER KEY

1. T
2. T
3. F
4. F
5. T

All of your answers should agree with the answers on the Answer Key. If you missed any, go back and repeat one or more of the Learning Activities for this Enabling Objective.

## LEARNING ACTIVITIES FOR ENABLING OBJECTIVE 2
number

**RVTC**

Enabling objective:

Practice analyzing DC circuits with a volt-ohm-milliammeter.

### PROCEDURE

| LEARNING ACTIVITIES | RESOURCES |
|---|---|
| 1. Obtain necessary material to take voltage and current readings from storage area. | 1. a. Simpson 260 VOM<br>b. Simpson 260 VOM Operator's Manual<br>c. Power supply board |
| 2. Practice taking voltage and current readings by following the steps in Resource No. 2. | 2. Exercise Sheet enclosed, Voltage and Current Readings |
| 3. Have instructor check your work. | 3. Instructor |
| 4. When you think you can perform this task, take the Performance Test. | 4. Performance Test for task B-04. |
| 5. Return all material to designated storage area. | 5. a. Material<br>b. Storage area |

## Voltage and Current Readings

1. Plug in power supply board.
2. Refer to the Simpson 260 VOM Operator's Manual to take the following readings:
    a. All power supply voltages.
    b. Voltage drops across all resistors (the sum of the voltage drops should equal the applied EMF in a given circuit.)
    c. The current flow in all circuits.

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**PERFORMANCE TEST FOR** B 0 4

duty task number

**RVTC**

DUTY B

TASK 04

ATTEMPT

STUDENT

DATE

☐ Attained
Not attained

EVALUATOR

DEPT. IN

PROG. 9273

**DIRECTIONS:** Given access to a VOM and power supply board, you will analyze DC circuits with the VOM. You will be evaluated for attainment of this task, based upon the items listed below.

## PERFORMANCE STANDARDS

ALL ITEMS MUST BE MARKED YES FOR ATTAINMENT.

| | YES | NO |
|---|---|---|
| 1. Were leads in proper jacks (referred to in Simpson's 260 VOM Operator's Manual) for voltage readings? | | |
| 2. Was initial voltage measurement taken using highest scale? | | |
| 3. Were voltage readings accurate (accuracy referred to in Simpson's 260 VOM Operator's Manual)? | | |
| 4. Was polarity recognized? | | |
| 5. Was function switch set to "MA" scale for amperage readings? | | |
| 6. Was meter placed in series to read current? | | |
| 7. Were current readings accurate (accuracy referred to in Simpson's 260 VOM Operator's Manual)? | | |
| 8. Was meter turned to transit position for storage? | | |

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## Instructional Resources

### Text

Loper, Orla E., Direct Current Fundamentals, Litton Educational Publishing, Inc., New York, 1978.

Simpson's 260 VOM Operator's Manual, Simpson Electric Co., Illinois.

### Audiovisuals

Electrical Troubleshooting with a VOM, Industrial Training, Inc., 1979.

Meter Readers, Educational Design, Inc., 1976.

**KNOWLEDGE TEST FOR** B 0 4 **RVTC**

duty task number

DUTY B TASK 04 DEPT. IN PROG. 9273

Task: Analyze DC Circuits With a Volt-Ohm-Milliammeter (VOM)

**DIRECTIONS:** The items below are Multiple Choice. On the separate Answer Sheet, put the letter of the correct answer in the blank to the left of the number of the question.

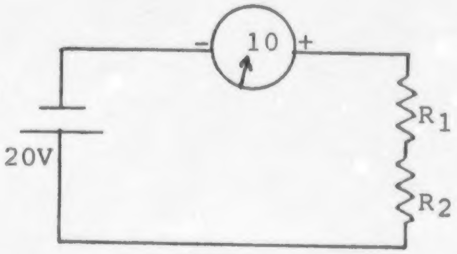
DO NOT MARK ON THIS TEST!

1. The ammeter is connected in:
   - a. parallel.
   - b. series parallel.
   - c. series.
   - d. across a circuit.

2. The best portion of the meter scale for accurate readings is the:
   - a. middle.
   - b. left side.
   - c. right side.
   - d. any of the above.

3. Shunts are used in:
   - a. voltmeters.
   - b. ohmmeters.
   - c. ammeters.
   - d. megohmmeters.

4. The meter (to the right) reads 10:
   - a. ohms.
   - b. volts AC.
   - c. volts DC.
   - d. amps.



5. The meter with the greatest sensitivity would be rated at:
   - a. 1000 ohms/volts.
   - b. 50,000 ohms/volts.
   - c. 20,000 ohms/volts.
   - d. 15,000 ohms/volts.

6. A megohmmeter is used to measure:
   - a. insulation.
   - b. current.
   - c. high voltage.
   - d. AC voltage only.

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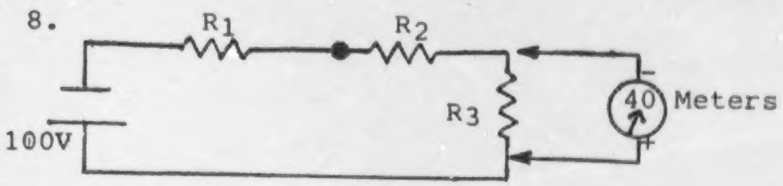
7. A milliamp is:
   - a. a million amps.
   - b. 1/1000 of an amp.
   - c. 1/10,000 of an amp.
   - d. 10 amps.

8.

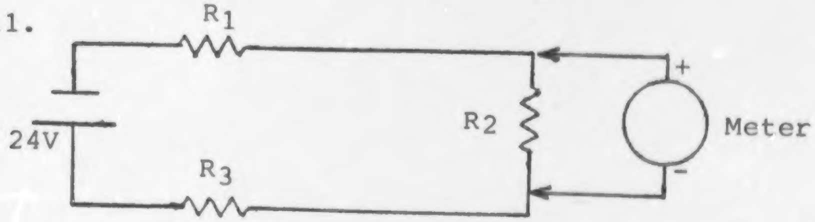


The meter above reads:
   - a. 40 volts AC.
   - b. 40 amps.
   - c. 40 milliamps.
   - d. 40 volts DC.

9. To read an unknown voltage, start with:
   - a. any voltage range.
   - b. lowest voltage range.
   - c. highest voltage range.
   - d. meter in ammeter range.

10. .25 amperes can be written as:
   - a. 250 milliamps.
   - b. 25 milliamps.
   - c. .025 milliamps.
   - d. 2500 milliamps.

11.



The meter above reads:
   - a. milliamps.
   - b. DC volts.
   - c. backwards.
   - d. zero.

12. Never use a meter:
   - a. on live circuits.
   - b. standing on a wet surface.
   - c. on circuits of unknown voltage.
   - d. on solid state circuits.

cont.

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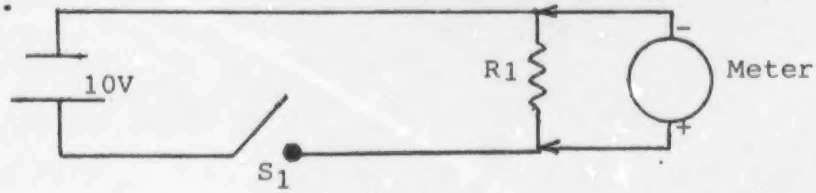
13. The meter with its own power source which can be used to check circuit continuity is called:

    a. a voltmeter.
    b. an ammeter.
    c. a wattmeter.
    d. an ohmmeter.

14. A voltmeter is always connected:

    a. in series with a circuit.
    b. across a circuit.
    c. by opening a circuit.
    d. with range scale on lowest range.

15.



In the above circuit, the meter will read:

a. 10 volts DC.
b. 10 amps.
c. 10 milliamps.
d. zero.

# KNOWLEDGE TEST ANSWER KEY

**RVTC**

DUTY B
TASK 04
DEPT. IN
PROG. 9273

## Multiple Choice questions

c 1.
a 2.
c 3.
d 4.
b 5.
a 6.
b 7.
d 8.
c 9.
a 10.
c 11.
b 12.
d 13.
b 14.
d 15.
____ 16.
____ 17.
____ 18.
____ 19.
____ 20.
____ 21.
____ 22.
____ 23.
____ 24.
____ 25.

## True-False questions

T F 1.
T F 2.
T F 3.
T F 4.
T F 5.
T F 6.
T F 7.
T F 8.
T F 9.
T F 10.
T F. 11.
T F 12.
T F 13.
T F 14.
T F 15.
T F 16.
T F 17.
T F 18.
T F 19.
T F 20.
T F 21.
T F 22.
T F 23.
T F 24.
T F 25.

## Matching questions

____ 1.
____ 2.
____ 3.
____ 4.
____ 5.
____ 6.
____ 7.
____ 8.
____ 9.
____ 10.
____ 11.
____ 12.
____ 13.
____ 14.
____ 15.
____ 16.
____ 17.
____ 18.
____ 19.
____ 20.
____ 21.
____ 22.
____ 23.
____ 24.
____ 25.

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# APPENDIX D

Copy of Letters From Joe D. Mills, Director of Division of Vocational Education Sent to Selected County School Superintendents and Presidents of Community Colleges, Inviting Their Participation in Field Testing Project

STATE OF FLORIDA
DEPARTMENT OF EDUCATION
TALLAHASSEE 32301

RALPH D. TURLINGTON
COMMISSIONER

Joe D. Mills
Director
Division of Vocational Education

October 23, 1981

Dr. Ray V. Pottorf
Superintendent of Schools
Lee County School Board
2055 Central Avenue
Fort Myers, Florida 33901

Dear Dr. Pottorf:

The Vocational Division is in the process of selecting institutions for field-test sites for a research project being conducted by the University of South Florida, entitled "Field-Test Competency-Based Vocational Education (CBVE) Learning Guides. The learning guides (instructional packets) were developed at Ridge Vocational-Technical Center in six programs: Industrial Electricity, Welding, Clerical Occupations, Masonry, Cosmetology, Heavy Truck/Bus (Diesel).

Vocational instructors who take part in the project will receive student learning guides to review in their program area and will be asked to field-test 20-40 percent of the total guides with their students. Two workshops will be conducted to introduce instructors to the materials and field-test procedures and to provide for an exit interview. The first workshop is scheduled for early December with field-test activities to begin in January, 1982. Cost for participants' travel and per diem will be covered through project funds.

For your convenience, a form is attached for you to mark whether or not your district will be able to participate in the project and indicating your approval for us to contact the Vocational Center Director. Your assistance with this project will be greatly appreciated. If you have any questions about the project, please contact the project director, Dr. Robert E. Andreyka at the University of South Florida (813) 974-2100, Extension 240.

Respectfully yours,

Joe Mills

Joe D. Mills, Director
Division of Vocational Education

dmw

cc's: Local Administrator
Regional Program Administrator
Dr. Robert E. Andreyka

Attachment

Affirmative action equal opportunity employer

---

District Lee

Region IV

Institution Name Lee County Area Vocational-Technical Center

3800 Michigan Avenue

Fort Myers, FL 33901

Programs We Are Interested in Field-Testing: COSMETOLOGY

Check One

☐ yes — We will be able to participate in the Field-Testing CBVE Learning Guides Developed at Ridge Vocational-Technical Center Project. Feel free to correspond with the above institution.

☐ no — We will be unable at this time to participate in the above field-testing project.

Please mail this form to: Dr. Robert E. Andreyka, Project Director, Field-Testing CBVE Learning Guides, University of South Florida, Tampa, Florida 33620.

Please return by November 4, 1981.

# APPENDIX E

Copy of Letter Mailed to Selected Field Test Site Directors, Presidents, and Principals. List of Participating Instructors at each Site Follows.

UNIVERSITY OF SOUTH FLORIDA
TAMPA · ST. PETERSBURG · FORT MYERS · SARASOTA

COLLEGE OF EDUCATION
TAMPA, FLORIDA 33620
813 974-2100

November 5, 1981

Dr. W. Jack Fuller, Dean, Vocational Education
Santa Fe Community College
P.O. Box 1530
Gainesville, FL 32602

Dear Dr. Fuller:

Re: "Field-Test Competency-Based Vocational Education Learning Guides" Project

The Vocational Division is in the process of selecting institutions for field-test sites for a research project being conducted by the University of South Florida. Our records indicate that you received a copy of the letter Joe Mills sent to your college President asking for your participation in this project. We have received the form indicating his approval.

The student learning guides are being field-tested in each of the five vocational regions in the state. Student learning guides are instructional packets that guide each learner through a learning process to attain the task. A learning guide is written for each task identified on the program's task listing. Instructors participating in this field-test project will be asked to review all the guides for their program and to field-test 20-40% of the guides with at least two students per guide. We are interested in working with your Cosmetology and Industrial Electricity, and Masonry program(s).

Please discuss this project with your instructors and identify one volunteer for each of the above programs. We need the names of your instructors we will be working with by November 12, 1981. There are additional details about the Orientation Workshop scheduled for December 1 and 2 at Ridge Vocational-Technical Center that we will send directly to the instructors along with motel accommodations, maps, etc.

THE UNIVERSITY OF SOUTH FLORIDA IS AN AFFIRMATIVE ACTION EQUAL OPPORTUNITY INSTITUTION

During the workshop participants will receive detailed procedures about reviewing and field-testing the learning guides, observe CBVE in action at Ridge, and discuss the learning guides and management of CBVE with the Ridge instructors. They will also receive the materials to be field-tested along with the appropriate evaluation forms.

Reimbursement for the workshop expenses will be based on per diem and travel for one automobile with all instructors traveling together. These checks will be issued after the workshop and covered through project funds. We wanted to make you aware of the workshop dates as soon as possible because of out-of-county leave requests.

I have had the pleasure of working with the Ridge staff during the development of these learning guides, and we are excited about field-testing them with other instructors and students. Sonia Parmer is assisting me with this project, and we will schedule two or three visits to your campus after the workshop to provide technical assistance. If you have questions, please feel free to call us at the University of South Florida, (813) 974-2100.

Sincerely yours,

Robert E. Andreyka
Professor
Adult and Vocational Education

P.S. Attached is a form for the names of your volunteers.

Enclosures

cc: Dr. Dave McQuat, Bureau of Vocational Research, Dissemination and Evaluation

Dr. L.W. Harrell, Program Implementation Section

Mr.Alan J. Robertson, President, Santa Fe Community College

District

Region II

Institution Name Santa Fe Community College
P.O. Box 1530
Gainesville, FL 32602

| Programs We are Interested in Field-Testing: | Instructor's Name |
|---|---|
| Cosmetology | |
| Industrial Electricity | |
| Masonry | |

Local Administrator's Signature

Please mail this form to: Dr. Robert E. Andreyka, Project Director, Field-Testing CBVE Learning Guides, University of South Florida, 4202 Fowler Avenue, Tampa, FL 33620.

Please return by November 12, 1981.

## "Field - Test Competency-Based Vocational Education Learning Guides Developed at Ridge Vocational-Technical Center"

Robert E. Andreyka, Professor
Project Director
Adult and Vocational Education
UNIVERSITY OF SOUTH FLORIDA
Telephone: (813) 974-3455
Ext 33 or 36
SUNCOM 574 3455

Sonia Parmer
Project Coordinator
UNIVERSITY OF SOUTH FLORIDA

Marie Tapia
Project Secretary
UNIVERSITY OF SOUTH FLORIDA

## Ridge Instructors Assisting as Consultants to Project

RIDGE VOCATIONAL TECHNICAL CENTER
7700 State Road 544
Winter Haven, FL 33880
Telephone (813) 4226402
Bill Hampton, Director

| | | |
|---|---|---|
| Jean Finkbiner | — | Clerical |
| Grace Bliss | — | Cosmetology |
| Bill Lewis | — | Industrial Electricity |
| Arnold Abbott | — | Heavy Truck/Bus |
| John Berry | — | Masonry |
| Dick Bausum | — | Welding |

## FIELD - TEST SITES BY VOCATIONAL EDUCATION REGIONS

| Regional Offices | | Counties | Institutions | Clerical | Cosmetology | Indust. Elect. | Heavy Truck/Bus | Masonry | Welding |
|---|---|---|---|---|---|---|---|---|---|
| Mr. R. T. Caldwell<br>Regional Program Director<br>Department of Education<br>Vocational Division<br>Knott Building<br>Tallahassee, Fl 32301<br>SUNCOM 278 1770<br>(904) 488 1770 | Region 1 | Mr. Peter Holman, Superintendent<br>Bay County Schools<br>P.O. Drawer 820<br>Panama City, Fl 32401<br>Mr. William Kirby, Coordinator of Adult, Vocational Education and Community Services | Mr. M. C. "Bud' Riviere, Director<br>•Thomas P. Haney Vocational-Technical Center<br>3016 Highway 77<br>Panama City, Fl 32405<br>(904) 769 2191 | X | X | | | | X |
| Mrs. Linda Slaugh<br>Business Education Consultant<br>Mr. Bob Collard<br>Industrial Education Consultant | | Mr. Charles W. Stokes, Superintendent<br>Escambia County Schools<br>P. O. Box 1470<br>Pensacola, Fl 32597<br>(904) 432 6121 | Mr. Waymon Wynn, Director<br>•George Stone Vocational Technical Center<br>Rt. #10, Box 530<br>Pensacola, Fl 32506<br>(904) 944 1424 | | | X | X | X | |
| | | Mr. James B. Jordan, Director of Vocational Education<br>5402 Lillian Highway<br>Pensacola, Fl 32506<br>(904) 456 8631 | Mr. Donnie Treadwell, Evening Director | | | | | | |
| | | Mr. Charles Couch, Superintendent<br>Leon County Schools<br>2757 W. Pensacola Street<br>Tallahassee, Fl 32304<br>(904) 576 8111 | Mr. James H. Joyce, Director<br>•Lively Area Vocational-Technical Center<br>500 N. Appleyard Drive<br>Tallahassee, Fl 32304<br>(904) 576 3181 | | X | | | | |
| | | Ms. Andrea Barrett<br>Director of Vocational Education<br>Leon County Schools<br>500 N. Appleyard Drive<br>Tallahassee, Fl 32304<br>(904) 487 1834 | Dr. Bob Rickburg, President<br>•Chipola Junior College<br>College Avenue<br>Marianna, Fl 32446<br>(904) 526 2761 | | X | | | | |

| Regional Offices | | Counties | Institutions | Clerical | Cosmetology | Indust. Elect. | Heavy Truck/Bus | Masonry | Welding |
|---|---|---|---|---|---|---|---|---|---|
| Mr. F. D. McCormick<br>Regional Program Director<br>Department of Education<br>Professional Office Center<br>901 N.W. 8th Avenue C-5<br>Gainesville, Fl 32601<br>SUNCOM 352 7917<br>(904) 373 8551 | Region 2 | Mr. Herb A. Sang, Superintendent<br>Duval County<br>1701 Prudential Drive<br>Jacksonville, Fl 32207<br>(904) 633 3131 | Mr. Joe Mitchell, Principal<br>•Westside Vocational Skills Center<br>7450 Wilson Boulevard<br>Jacksonville, Fl 32210<br>(904) 778 7212 | X | | | X | | X |
| Mr. Stephen Brinsko<br>Business Education Consultant | | Mr. David A. Rigsby, General Director of Vocational Education<br>1450 Flagler Avenue<br>Jacksonville, Fl 32207 | | | | | | | |
| Mr. Walter Johnson<br>Industrial Education Consultant | | | Mr. Alan J. Robertson, President<br>•Santa Fe Community College<br>P. O. Box 1530<br>Gainesville, Fl 32602<br>(904) 377 5161<br><br>Dr. W. Jack Fuller<br>Dean, Vocational Education | | X | X | | X | X |

| | Regional Offices | Counties | Institutions | Clerical | Cosmetology | Indust. Elect. | Heavy Truck/Bus | Masonry | Welding |
|---|---|---|---|---|---|---|---|---|---|
| Region 3 | Mr. H. L. McCauslin<br>Regional Program Director<br>Department of Education<br>Zora Neale Hurston State Office Building, Suite 602<br>400 W. Robinson Street<br>Orlando, Fl 32801<br>SUNCOM 344 6314<br>(305) 423 6314<br>Ms. Barbara Smith, Business Education Consultant<br>Mr. Stanley Warren<br>Industrial Education Consultant | Mr. Carl Pettitt<br>Superintendent of Lake County Schools<br>201 W. Burleigh Boulevard<br>Tavares, Fl 32778<br>(904) 343 3531<br>Mr. Fred Garner, Coordinator of Vocational and Technical Education | Mr. Kenneth A. Bragg, Director<br>• Lake County Area Vocational-Technical Center<br>2001 Kurt Street<br>Eustis, Fl 32726<br>(904) 357 8222 | | X | | | X | |
| | | Mr. James L. Schott<br>Superintendent of Orange County Schools<br>P. O. Box 271<br>Orlando, Fl 32802<br>(305) 422 3200<br>Mr. Robert Gahn, Jr.<br>Associate Supt. for Vocational, Technical, and Adult Education | Mr. Joseph E. Stephens, Director<br>• Mid-Florida Technical Institute<br>2900 W. Oak Ridge Road<br>Orlando, Fl 32809<br>(305) 855 5880 | | | | | | X |
| | | | Dr. Charles H. Polk, President<br>Dr. Mignon Tucker, Dean<br>• Daytona Beach Community College<br>P. O. Box 1111<br>Daytona Beach, Fl 32015<br>(904) 255 8131 SUNCOM 362 1011 | X | | | | | X |
| | | Mr. Roger Weaver, Superintendent of Citrus County Schools<br>1507 W. Main Street<br>Inverness, Fl 32650<br>(904) 726 1931<br>Mr. Glenn Wade, Director of Vocational and Adult Education | Mr. Roland Best, Director<br>• Withlacoochee Area Vocational Technical Center<br>1607 W. Main Street<br>Inverness, Fl 32650<br>(904) 726 2430 | | | X | | | |
| | | | Dr. Maxwell King, President<br>Dr. Joe Keller, Dean of Instruction<br>• Brevard Community College<br>1519 Clearlake Road<br>Cocoa, Fl 32922<br>(305) 632 1111 SUNCOM 361 1011 | | | | | | X |

| Regional Offices | | Counties | Institutions | Clerical | Cosmetology | Indust. Elect. | Heavy Truck/Bus | Masonry | Welding |
|---|---|---|---|---|---|---|---|---|---|
| Mr. Richard L. Gavin<br>Regional Program Director<br>Department of Education<br>715 E. Bird Street, Suite 309<br>Pan American Bank Building<br>Tampa, Fl 33604<br>SUNCOM 552 7857<br>(813) 933 2802 | Region 4 | Dr. Raymond O. Shelton<br>Superintendent of<br>Hillsborough County Schools<br>901 E. Kennedy Blvd.<br>Tampa, Fl 33602<br>(813) 272 4050 | Mrs. Alene J. Mahin, Principal<br>•Leto Comprehensive High<br>4409 W. Sligh Avenue<br>Tampa, Fl 33614<br>(813) 886 1741 | | | | | X | |
| Mr. Peter Coppola<br>Business Education Consultant | | Mr. Ralph Smouse, Jr.<br>Assistant Superintendent<br>Vocational, Technical, and<br>Adult Education | Mr. Peter S. LaBruzzo, Director<br>•Brewster Skills Center<br>105 W. Ross Avenue<br>Tampa, Fl 33602<br>(813) 272 4026 | X | | | | | X |
| Mr. Al Gonzalez<br>Industrial Education Consultant | | Dr. Ray V. Pottorf, Superintendent of Lee County Schools<br>2055 Central Avenue<br>Fort Myers, Fl 33901<br>(813) 334 1102 | Mr. Ronald E. Pentiuk, Director<br>•Lee County Area Vocational-Technical Center<br>3800 Michigan Avenue<br>Fort Myers, Fl 33901<br>(813) 334 4544 | | X | | | | |
| | | Mr. Kenneth Evans, Director<br>Adult, Vocational and Technical and Community Education<br>3800 Michigan Avenue<br>Ft. Myers, Fl 33901<br>(813) 334 6221 | | | | | | | |
| | | Dr. Scott Rose, Superintendent of Pinellas County Schools<br>P. O. Box 4688<br>Clearwater, Fl 33518<br>(813) 442 1171 | Mr. Warren Laux, Director<br>•Pinellas Vocational-Technical Institute<br>6100 154 Avenue N<br>Clearwater, Fl 33520<br>(813) 531 3531 | | | | X | | |
| | | Dr. H. J. Ross, Assistant Superintendent for Vocational Technical and Adult Education | Gloria Shumate, Director<br>•St. Petersburg Vocational-Technical Institute<br>901 34th St. South<br>St. Petersburg, Fl 33711<br>(813) 895 3671 | | | | | | X |
| | | Mr. R. C. Churchwell, Superintendent of Polk County Schools<br>P. O. Box 391<br>Bartow, Fl 33830 | | | | | | | |
| | | Mr. George A. Johnson, Assistant Superintendent for Vocational Technical and Adult Education | Mr. William J. Hoffses, Director<br>•Polk Vocational-Technical Center<br>P. O. Box 720<br>Eaton Park, Fl 33840<br>(813) 665 1220 | | | X | | | |

| Regional Offices | | Counties | Institutions | Clerical | Cosmetology | Indust. Elect. | Heavy Tuck/Bus | Masonry | Welding |
|---|---|---|---|---|---|---|---|---|---|
| Mr. Gordon Oakley<br>Regional Program Director<br>Department of Education<br>8132 State Road 808<br>Boca Raton, Fl 33434<br>SUNCOM 451 5470<br>(305) 482 3500<br>John A. Fisher<br>Business Education Consultant<br>Frank Taylor<br>Industrial Education Consultant | Region 5 | Dr. Leonard M. Britton, Superintendent of Dade County Schools<br>1410 N. E. Second Avenue<br>Miami, Fl 33132<br>(305) 350 3268<br>Dr. John Standridge, Executive Director of Vocational and Adult Education<br>(same address as above)<br>(305) 350 3174 | Mr. Clarence R. Tunmer, Principal<br>•Robert Morgan Vocational-Technical Institute<br>18180 S.W. 122nd Avenue<br>Miami, Fl 33177<br>(305) 253 9920 | | X | | X | | X |
| | | Mr. Thomas J. Mills, Superintendent of Palm Beach County Schools<br>3323 Belvedere Road<br>West Palm Beach, Fl 33401<br>SUNCOM 472 5002<br>(305) 684 5002<br>Mr. Miles Bacon, Director of Vocational Education | Mr. Leon E. Perry, Director<br>•South Technical Education Center<br>1300 S W 30th Avenue<br>Boynton Beach, Fl 33435<br>(305) 737 7400 | X | | X | | | |
| | | Dr. William T. McFatter, Superintendent of Broward County Schools<br>P. O. Box 5408<br>Fort Lauderdale, Fl. 33310<br>(305) 765 6000<br>Dr. Winnie Dickinson, Director of Vocational Education<br>(305) 5248006 | Mr. Amos Bonner, Principal<br>•Dillard High School<br>2501 Northwest 11th Street<br>Fort Lauderdale, Fl 33311<br>(305) 581 4630 | | | | | X | |

## Instructors Names by Vocational Regions and Schools

### Region I

Thomas P. Haney Vocational-Technical Center (904) 769 3315
3016 Highway 77
Panama City, FL 32405

| Programs: | Instructors Names: |
|---|---|
| Clerical | Helen D. Croswell |
| Cosmetology | Myrtice Flora |
| Welding | Bill Mielke |

George Stone Vocational-Technical Center (904) 944 1424
Rt. # 10, Box 530
Pensacola, FL 32506

| Programs: | Instructors Names: |
|---|---|
| Industrial Electricity | Bruce Wallace |
| Heavy Truck/Bus (Diesel) | Charles Streit |
| Masonry | Isaac Lenon |

Lively Area Vocational-Technical Center (904) 576 3181
500 N. Appleyard Drive
Tallahassee, FL 32304

| Programs: | Instructors Names: |
|---|---|
| Cosmetology | Jo Daniels |

Chipola Junior College (904) 526 2761
College Avenue
Marianna, FL 32446

| Programs: | Instructors Names: |
|---|---|
| Cosmetology | Peggy D. Register |

Region II

Westside Vocational Skills Center (904) 778 7212
7450 Wilson Boulevard
Jacksonville, FL 32210

| Programs: | Instructors Names: |
|---|---|
| Clerical | Shirley Rogers |
| Heavy Truck/Bus (Diesel) | Bill White |
| Welding | Rushie Dixon |

Santa Fe Community College (904) 377 5161
P. O. Box 1530
Gainesville, FL 32602

| Programs: | Instructors Names: |
|---|---|
| Cosmetology | Orie R. Nelson |
| Industrial Electricity | Thomas E. Ryan |
| Masonry | John E. Gentry |
| Welding | Royce Moore |
| *Welding* | Robert Sundman |

## Region III

Lake County Area Vocational-Technical Center (904) 357 8222
2001 Kurt Street
Esutis, FL 32726

| Programs: | Instructors Names: |
|---|---|
| Cosmetology | Betty Holloway |
| Masonry | George Clark |

Mid-Florida Technical Institute (305) 855 5880
2900 W. Oak Ridge Road
Orlando, FL 32809

| Programs: | Instructors Names: |
|---|---|
| Welding | Joe Jarreau |

Daytona Beach Community College SUNCOM 362 1011
P.O. Box 1111 (904) 255 8131
Daytona Beach, FL 32015

| Programs: | Instructors Names: |
|---|---|
| Clerical | Evelyn Milewski |
| Welding | John A. Wolfram |
| Welding | John H. Wolfram |

Withlacoochee Area Vocational-Technical
Center (904) 726 2430
1607 W. Main Street
Inverness, FL 32650

| Programs: | Instructors Names: |
|---|---|
| Industrial Electricity | Dan Varnes |

Brevard Community College SUNCOM 361 1011
1519 Clearlake Road (305) 632 1111
Cocoa, FL 32922

| Programs: | Instructors Names: |
|---|---|
| Welding | George Gaich |

## Region IV

Leto Comprehensive High (813) 886 1741
4409 W. Sligh Avenue
Tampa, FL 33614

| Programs: | Instructors Names: |
|---|---|
| Masonry | Carl E. Coats |

Brewster Skills Center (813) 272 4026
105 W. Ross Avenue 272 4228
Tampa, FL 33602

| Programs: | Instructors Names: |
|---|---|
| Clerical | Della Escobio |
| Welding | William Moore |

Lee County Area Vocational-
Technical Center (813) 334 4544
3800 Michigan Avenue
Fort Myers, FL 33901

| Programs: | Instructors Names: |
|---|---|
| Cosmetology | Betty J. Yates |

Pinellas Vocational-Technical Institute (813) 531 3531
6100 154 Avenue North
Clearwater, FL 33520

| Programs: | Instructors Names: |
|---|---|
| Heavy Truck/Bus (Diesel) | John R. Oldfield |

St. Petersburg Vocational-Technical
Institute (813) 895 3671
901 34th Street South
St. Petersburg, FL 33711

| Programs: | Instructors Names: |
|---|---|
| Welding | Joe Hoffman |

Polk Vocational-Technical Center (813) 665 1220
P. O. Box 720
Eaton Park, FL 33840

| Programs: | Instructors Names: |
|---|---|
| Industrial Electricity | Otto Toepfer |

## Region V

Robert Morgan Vocational-Technical Institute (305) 253 9920
18180 S.W. 122nd Avenue
Miami, FL 33177

| Programs: | Instructors Names: |
|---|---|
| Cosmetology | Sara E. Pilgrim |
| Heavy Truck/Bus (Diesel) | Dayle L. Frantsen |
| Welding | James L. Brantley |

South Technical Education Center (305) 737 7400
1300 S. W. 30th Avenue
Boynton Beach, FL 33435

| Programs: | Instructors Names: |
|---|---|
| Clerical | Frances E. Robinson |
| Ind. Electricity | Leonard Eisenberg |

Dillard High School (305) 581 4630
2501 Northwest 11th Street
Fort Lauderdale, FL 33311

| Programs: | Instructors Names: |
|---|---|
| Masonry | Robert F. Quider |

## *FIELD - TEST INSTRUCTORS BY PROGRAM AREA*

### Clerical Program

| | |
|---|---|
| Helen D. Croswell | Thomas Haney Vo-Tech |
| Shirley Rogers | Westside Vocational Skills |
| Evelyn V. Milewski | Daytona Beach Community College |
| Della Escobio | Brewster Skills Center |
| Frances Robinson | South Tech Ed Center |

### Cosmetology Program

| | |
|---|---|
| Myrtice B. Flora | Haney Voc-Tech Center |
| Jo Daniels | Lively Area Vocational |
| Peggy Register | Chipola Junior College |
| Orie R. Nelson | Santa Fe Community College |
| Betty Yates | Lee Vo-Tech |
| Betty L. Holloway | Lake County Area Vo-Tech |
| Sara E. Pilgrim | Robert Morgan Vo-Tech |

## Industrial Electricity

| | |
|---|---|
| Bruce L. Wallace | George Stone Area Vocational Center |
| John E. Gentry | Santa Fe Community College |
| Dan Varnes | Withlacoochee Vo-Tech Center |
| Otto Toepfer | Polk Vocational-Technical Center |
| Leonard Eisenberg | South Tech Ed Center |

## Heavy Truck/Bus (Diesel)

| | |
|---|---|
| Charles A. Streit, Sr. | George Stone Area Vocational Center |
| Bill White | Westside Skills Center |
| John R. Oldfield | Pinellas Vocational-Technical Center |
| Dayle L. Frantsen | Robert Morgan Vo-Tech Center |

## Masonry Program

| | |
|---|---|
| Isaac Lenon | George Stone Vocational Center |
| Tom Ryan | Santa Fe Community College |
| George Clark | Lake County Area Vo-Tech |
| Carl E. Coats | Leto High School |
| Robert F. Quider | Dillard High School |

## Welding Program

| | |
|---|---|
| Bill Mielke | Haney Vo-Tech Center |
| Rushie Dixon | Westside Skills Center |
| Royce Moore | Santa Fe Community College |
| Joe Jarreau | Mid-Florida Technical Institute |
| John A. Wolfram | Daytona Beach Community College |
| John H. Wolfram | Daytona Beach Community College |
| George Gaich | Brevard Community College |
| William Moore | Brewster Skills Center |
| Joe Hoffman | St. Petersburg Vo-Tech Institute |
| James L. Brantley | Robert Morgan Vo-Tech Center |
| Robert Sundman | Santa Fe Community College |

# APPENDIX F

## Instructor's Personal Data Form

## INSTRUCTOR'S PERSONAL DATA SHEET

Instructor's Last Name, First, M.I. (Please print) ____________________

Social Security Number ____________________

1. Program you are instructing:
_____A. Clerical Occupations
_____B. Cosmetology
_____C. Heavy Duty Truck Bus Mechanics
_____D. Industrial Electricity
_____E. Masonry
_____F. Welding

2. School name and address where employed:
____________________
____________________
____________________

3. Education: What is the highest level of formal education you have completed? Check only one.
_____A. GED
_____B. High School
_____C. Less than one year of college
_____D. Less than two years of college
_____E. Less than three years of college
_____F. Less than four years of college
_____G. Associate Degree
_____H. Bachelor's Degree
_____I. Master's Degree
_____J. Ed Specialist
_____K. Doctorate

Major: ____________________

4. Is your teaching certificate in are of field-test program? _____ yes _____ no

5. Vocational Teaching Certificate: **Check one.**
_____A. Temporary, first year
_____B. Temporary, second year
_____C. Temporary, third year
_____D. Regular Certificate/Rank III/Bachelor's-Vocational
_____E. Advanced Vocational Level of Training/Rank II/Master's - Vocational
_____F. Specialist in Education
_____G. Doctorate

6. Are you currently enrolled in a college course? _____ yes _____ no

7. If so, which college?
_____UF
_____FSU
_____FAMU
_____USF
_____FAU
_____UWF
_____UCF
_____FIU
_____UNF

____________________ Other College

8. Are you working toward a higher degree? _____ yes _____ no

9. Are you working toward certification? _____ yes _____ no

10. Are you taking classes for extension of your teaching certificate? _____ yes _____ no

11. How many years of full-time teaching experience have you completed? Check one and list the number of years.
_____A. Less than three years _____
_____B. Three to seven years _____
_____C. Seven to eleven years _____
_____D. Eleven to sixteen years _____
_____E. Sixteen to twenty years _____
_____F. More than twenty years _____

12. How many years of work experience do you have in the program area you are now instructing? Check one and list number of years.
_____A. Less than three years _____
_____B. Three to seven years _____
_____C. Seven to eleven years _____
_____D. Eleven to sixteen years _____
_____E. Sixteen to twenty years _____
_____F. More than twenty years _____

13. How many instructors teach in this field-test program area in your school?
_____A. One
_____B. Two
_____C. Three
_____D. Four
_____E. Five
_____F. More than five _____ Number

14. _____A. Female
_____B. Male

15. Marital Status:
_____A. Single
_____B. Married
_____C. Divorced

16. Race (Check one)
_____A. White (not of Hispanic origin)
_____B. Hispanic
_____C. Black (not of Hispanic origin)
_____D. Am. Indian or Alaskan native
_____E. Asian or Pacific Islander
_____F. Other, specify ____________________

17. Check the appropriate range of your age and list your age on the line following
_____A. Under thirty years _____
_____B. 30-40 years _____
_____C. 40-50 years _____
_____D. 50-60 years _____
_____E. Over 60 years _____

18. Which of the following best describes the exposure you have had to competency-based vocational education (CBVE)?
_____A. Practically no exposure
_____B. Limited exposure
_____C. More than limited, but not extensive exposure
_____D. Extensive exposure

19. Exposure and assistance received for CBVE has been mostly from
_____A. State Workshops
_____B. State and regional vocational staff
_____C. University classes
_____D. Local district and school personnel
_____E. Teacher Education Centers
_____F. Other, please specify ____________________

20. Are you currently involved in CBVE implementation in your school program? _____ yes _____ no

21. Do you want college credit for participating in the field-testing project? _____ yes _____ no

22. If yes, specify
_____A. Graduate credit
_____B. Undergraduate credit

23. Are you involved in another business or job in addition to your present teaching position? _____ yes _____ no

BEST COPY AVAILABLE

# APPENDIX G

## Agenda for Orientation Workshop

December 1 and 2, 1981

# FIELD-TEST COMPETENCY-BASED VOCATIONAL EDUCATION LEARNING GUIDES DEVELOPED AT RIDGE VOCATIONAL-TECHNICAL CENTER PROJECT

Orientation Workshop
December 1 and 2, 1981

Tuesday, December 1, 1981

| | | |
|---|---|---|
| 8:30 | Doughnuts and Coffee | |
| 9:00 | Introductions | Dr. Robert E. Andreyka, USF<br>Project Director |
| 9:10 | Welcome to Ridge | Mr. Bill Hampton, Director<br>Ridge Vocational-Technical Center |
| 9:25 | Workshop Agenda | |
| 9:30 | Florida's Demonstration Site for CBVE | |
| | Purpose of Field-Testing Project | Dr. Andreyka |
| 10:20 | Break | |
| 10:30 | Tour of Ridge Campus | Mr. Kenneth Addair<br>Assistant Director-Curriculum<br>Ridge Vocational-Technical Center |
| | | Mr. Fred Ryder<br>I.C.E. Coordinator<br>Ridge Vocational-Technical Center |
| 11:30 | Luncheon<br>Prepared by Culinary Arts Program<br>$3.50 | |
| | Division of Vocational Education Comments<br>Tallahassee, Florida | Mr. W. R. Jeffries, Director<br>Program and Staff Development |
| 12:30 | Student and Teacher Student Learning Guide Evaluation Forms | Mrs. Sonia Parmer<br>Project Coordinator |
| 1:30 | The Ridge Student Learning Guide Format | Dr. Andreyka |
| 2:15 | Break | |
| 2:30 | Meet with Ridge Instructors to discuss learning guides, management, organization, types of resources, etc. | |
| | Clerical Occupations | Mrs. Jean Finkbiner |
| | Cosmetology | Mrs. Grace Bliss |
| | Heavy Duty Truck/Bus Mechanics (Diesel) | Mr. Arnold Abbott |
| | Industrial Electricity | Mr. Bill Lewis |
| | Masonry | Mr. John Berry |
| | Welding | Mr. Dick Bausum |
| 4:00 | Adjourn | |

Wednesday, December 2, 1981

| | | |
|---|---|---|
| 8:00 | Doughnuts and Coffee | |
| 8:15 | Questions and Answers | Project Staff |
| 8:30 | Student Orientation to Using Ridge Learning Guides | Ms. Wilma McCarty<br>Curriculum Specialist<br>Ridge Vocational-Technical Center |
| 9:30 | Round Table Review of Task Listing and Program Learning Guides | Dr. Andreyka |
| 10:00 | Break | |
| 10:15 | Observe and question Ridge instructors in action with their students in the six program areas. | |
| 11:30 | Luncheon ($3.50) | |
| 12:30 | Continue: Round Table Review of Task Listing and Program Learning Guides | |
| 2:00 | Evaluation of Workshop<br>College Credit<br>Travel Reimbursement Forms | Mrs. Parmer |
| 2:40 | Concluding Remarks | Mr. Hampton |
| 3 p.m. | Exit Workshop | |

# APPENDIX H

## Procedures and Purpose of Field Test Project

## PURPOSE OF FIELD-TESTING PROJECT

Competency-based vocational education has been a high priority of The Division of Vocational Education (DVE) for several years. Since the beginning of the DVE sponsored project, "Establishing A Demonstration Site for Competency-Based Vocational Education at Ridge Vocational-Technical Center," in July, 1979, first-draft student learning guides have been developed for entry-level tasks in the programs offered at Ridge. (A student learning guide is a well-defined set of directions for students to follow in attaining the desired task. The student learning guide includes objectives, learning activities, resources, and a performance test. Student learning guides are developed for each task identified in the program's task listing. The program task listing is a comprehensive list of duties and tasks performed by workers in an occupation.) Ridge also serves as Florida's demonstration site for educators interested in visiting and observing the implementation of open-entry, open-exit competency-based vocational education (CBVE).

The purpose of this project is to field-test in all five vocational education regions of the state the first-draft student learning guides developed in the following programs at Ridge:

Industrial Electricity
Heavy Duty Truck/Bus Mechanics (Diesel)
Cosmetology
Clerical Occupations
Masonry
Welding

For untested materials formative evaluation is needed to determine effectiveness of materials prior to revisions and distribution of materials.

Revisions are necessary in all developmental work and the first-draft copies of the Ridge guides will be revised before dissemination by the Division of Vocational Education. Your input and suggestions as you and your students work with the materials will be very helpful in this revision process. Field-testing the student learning guides will also provide you with CBVE materials to assist your school in their implementation of CBVE.

You are members of a select group from vocational educators throughout the State of Florida and have an opportunity to convince others that this approach to instruction can work. The Field-Testing Project Staff will be able to assist you as you encounter questions during this project.

1. **Review Task Listing**

Compare the Ridge Task Listing to your course outline or task listing, considering community training needs, and discuss with other instructors to determine if other tasks should be added to the listing or if some of the tasks included should be deleted (why?).

Write up your findings, staple to a Ridge Program Task Listing and return to Dr. Andreyka by January 15, 1982.

2. Review Student Learning Guides to:
   a. Become familiar with the program
   b. Identify learning guides that could be field-tested as is
   c. Determine what adaptions must be made before your students can field-test other guides
   d. Adapt learning guides using the procedures outlined in workshop
   e. Organize files and resources to plan orientation for students field-testing
   f. Send Dr. Andreyka a list of the learning guides you are field-testing and also indicate your reason for omitting the other guides in this program. (You may use a Program Task Listing to record this information.) This information is needed by January 29, 1982.

3. Field-Test selected student learning guides
   a. Orientate students to using the guides and providing constructive feedback on the materials.
   b. Field-test 20-40% of the program's guides using at least three students on each guide field-tested. Select a student of average ability, one doing above average work, and another student performing below average for each guide field-tested. DO NOT PRETEST-you will be evaluating materials.
   c. Monitor progress of students making sure they follow directions in the learning guides.
   d. Obtain an evaluation form from every student on each individual guide they field-test.
   e. Add instructors comments on Student's Evaluation Form.
   f. Complete Instructor's Evaluation Form for each guide field-tested.
   g. Write your suggestions for revisions directly on one set of guides and return along with all evaluation forms to Dr. Andreyka by April 30, 1982.

4. Attend a one-day post field-testing work session. Location and date to be announced later.

# APPENDIX I

## Agenda for Orientation Workshop

January 19 and 20, 1982

FIELD-TEST COMPETENCY-BASED VOCATIONAL EDUCATION
Learning Guides Developed at
Ridge Vocational-Technical Center Project

## Orientation Workshop

Tuesday, January 19, 1982

| | | |
|---|---|---|
| 9:00 | Doughnuts and Coffee | |
| 9:15 | Introductions | Dr. Robert E. Andreyka, USF<br>Project Director |
| 9:25 | Welcome to Ridge | Mr. Bill Hampton, Director<br>Ridge Vocational-Technical Cent |
| 9:45 | Workshop Agenda | |
| | Florida's Demonstration Site for CBVE - Dr. Andreyka | |
| 10:30 | Tour of Ridge Campus | Mr. Kenneth Addair<br>Assistant Director-Curriculum<br>Ridge Vocational-Technical Cent |
| | | Mr. Fred Ryder<br>I. C. E. Coordinator<br>Ridge Vocational-Technical Cent |
| 11:30 | Luncheon<br>Prepared by Culinary Arts Program - $ 3.50 | |
| 12:30 | Purpose of Field-Testing Project - Dr. Andreyka | |
| 1:00 | Observe Students in Program Area | |
| 2:30 | Meet with Ridge Instructors to discuss learning guides, manageme<br>organization, types of resources, etc. | |
| | Clerical Occupations | Mrs. Jean Finkbiner |
| | Welding | Mr. Dick Bausum |
| | Heavy Duty Truck/Bus | Mr. Arnold Abbott |
| 4 p.m. | Adjourn | |

Wednesday, January 20, 1982

| | | |
|---|---|---|
| 8:00 | Doughnuts and coffee | |
| 8:15 | Questions and Answers | Project Staff |
| 8:30 | Student and Instructor Forms to be used in Field-testing Project | Mrs. Sonia Parmer<br>Project Coordinator |
| 9:30 | Round Table Review of Task Listing and Program Learning Guides | Dr. Andreyka |
| 10:15 | Observe and question Ridge instructors in action with their students in the program areas. | |
| 11:30 | Luncheon | |
| 12:30 | Continue with instructors in program area. | |
| 2:00 | Evaluation of Workshop<br>College Credit<br>Travel Reimbursement Forms | Mrs. Parmer |
| 2:40 | Concluding Remarks | Mr. Hampton |
| 3 p.m. | Exit Workshop | Dr. Andreyka |
| | Pick up materials | |

# APPENDIX J

## Evaluation of Orientation Workshops

## EVALUATION OF ORIENTATION WORKSHOPS

"Field-Test CBVE Student Learning Guides
Developed at
Ridge Vocational-Technical Center Project"

December 1 and 2, 1981
January 19 and 20, 1982

1. What did you like the best about the workshop?

I liked the atmosphere and spirit shown by all.
The manner in which it was conducted. (2)*
Leadership. (2)
Better understanding of "How To's"
Getting together with teachers from around the State.
The information necessary to field test was given in a clear manner.
The teachers in the Business Department were extremely helpful and friendly.
Talking to the instructors and students, and the way the system works. (7)
Organization (2)
Information
Visit to the program area and teacher's input.
New ideas, concepts to try at home and school.
Meeting with the teachers and the members of different schools.
Being able to visit in our program area and receiving all the new added materials. (6)
Discussing tasks with other instructors
Student learning guides -- all phases
Minimal amount of wasted time
Mr. Hampton was very motivated and inspiring.
Easy to understand. Know how to apply CBVE when I return to classroom.
You had all materials and forms ready and we are carrying back something we can use.
Meeting with and discussing tasks with other instructors.
Being able to discuss the learning guides with teachers and students. Making comparison with the materials (learning guides) already in use. (2)
Visit to Ridge Vocational-Technical Center with Ridge instructors.
Exchange of ideas with other cosmetology instructors.
Staying on schedule; having lunch on campus; preparedness of leaders; correctness of materials handed out; no night meetings.
Courtesy of the workshop personnel and their willingness to assist in any area of misunderstanding. Helpfulness. (3)

2. What did you like least about the workshop?

Nothing (14)
Too Short (3)

3. Did the workshop increase your knowledge of CBVE?

Yes (24)
Very Much (4)
100% (1)

4. What topics should we spend more time on in future orientation workshops?

O.K. as is
How this material can best be used
All. (2)
How to get more people (instructors) involved. (4)
Implementation of material
More contact with the specific department you represent.
Using the guide in the field area.
Attendance systems and grading procedures.
None
Better briefing before attending workshop, only school officials were briefed, and incorrectly then.
The "log" used for recordkeeping system.
Have information on JUST WHAT IS WANTED from participants. Briefly mention other points about school but no handouts.
Time on topics was about right for me. The time spent in the shop with the instructor helps.
Breaking down learning guides -- one in a subject area such as filing or accounting.
How to implement the competency-based program. How to cope with student who has to continuously be recycled.
I think we had good coverage on all topics.
CBVE construction and development.
I do not feel that it is possible to answer this question until after the use of the information. (3)
Not so many tasks at one time. Spend more time on each task.
More time with teachers in same trade.
Those who do not know CBVE need to spend more time in program area. (3)
Spend more time in classroom area. (2)

5. Circle your overall rating of the workshop (5 = highest rating).

5's - 21
4's - 8
3's - 1

COMMENTS:

Excellent workshop
Very professional
Excellent facilitation at Ridge
Thank You!
I am delighted to have taken part in this workshop!
There should be an administrators workshop so they are aware of what's going on.
When we were on the sidewalk out front, a staff person who was not in the workshop said "Welcome to Ridge." I appreciate this type of pride. Thanks.
One of the most positive things will be the chance to read the material and to see how it will fit with my CBVE Program.
All teachers are very sociable and friendly.
Enjoyed being here. Thanks so much for your invitation here.
I think that this would be easier to put in effect at the start of a new school year -- as far as the high school program.

* Figures that are in parenthesis indicates the number of like responses.

# APPENDIX K

## Exit Workshop Agenda

## FIELD-TEST COMPETENCY-BASED VOCATIONAL EDUCATION
## LEARNING GUIDES DEVELOPED AT
## RIDGE VOCATIONAL-TECHNICAL CENTER PROJECT

### Exit Workshop

May 17 and 18, 1982

| | | |
|---|---|---|
| 9 A.M. | Coffee and Rolls | Court of Flags Meeting Room<br>Robert E. Andreyka, Professor<br>University of South Florida |
| 9:15 a.m. | Introductions | |
| 9:25 a.m. | Discuss Agenda | |
| 9:30 a.m. | Problems Encountered in Field Testing | |
| 10:30 a.m. | Break | |
| 10:45 a.m. | Organize First Small Group Session | |
| 11:00 a.m. | Groups Discuss Additions and Deletions Suggested for the Ridge Program Task Listings | |
| 12 noon | Lunch | |
| 1 P.M. | Groups Report on Session Regarding Task Listings and Student Performance | |
| 1:30 p.m. | Second Small Group Session - Evaluating Individual Student Learning Guides | |
| 2:45 p.m. | Break | |
| 4:15 p.m. | Discuss grading for USF Course Credit | |
| 4:30 p.m. | Adjournment | |

Resource Personnel: Sonia Parmer, USF Project Coordinator

Lisa Beverly and Wilma McCarty, Curriculum Specialists

# FIELD TEST COMPETENCY BASED VOCATIONAL EDUCATION

## LEARNING GUIDES DEVELOPED AT
## RIDGE VOCATIONAL TECHNICAL CENTER PROJECT

Exit Workshop — Robert E. Andreyka, USF, Professor — Tuesday, May 18, 1982

| | |
|---|---|
| 8:15 | Coffee |
| 8:30-9:15 | Discuss Student and Co Workers Reactions to CBVE Student Learning Guides-Collect Written Reports |
| 9:15-9:45 | Complete Group Evaluation of Individual Student Learning Guides |
| 9:45 - 10:00 | Break |
| 10:00 | Introduce RVTC Instructors |
| 10:10 | Small Groups with RVTC Instructors - Project and CBVE Management |
| 11:30 | Collect Learning Guides and Materials Used During the Field Test Project Year |
| 12 - 1 P.M. | Lunch |
| 1:00 | Small Groups-Suggested Revisions for Field testing Project Procedures |
| 1:30 | Report from Small Group Leaders |
| 2:00 | Travel/Evaluation Forms |
| 2:30 | Awards |
| 3 p.m. | Adjournment |

Resource Personnel: Sonia Parmer, Lisa Beverly, Wilma McCarty
Jean Finkbiner, Grace Bliss, Bill Lewis, Arnold Abbott
John Berry and Dick Bausum

# APPENDIX L

## Field Testing Instructors Perception of the Involvement and Reaction to Project by the Local Administration, Co-Workers and Students

## Appendix L

Each participating instructor was asked to use 5x8 cards at the Exit Workshop, and write about the involvement of their administration and co-workers with the field testing project. Listed below are these remarks along with the feedback received about the students' feelings toward this project:

1. Involvement of Administration:

-- Interest was shown as to exactly what work was being done in our department; however, to someone outside of the field the amount of work involved in field testing and revision would not readily be apparent.

-- The administration was supportive of our efforts but was unable to provide us with the necessary audio visual equipment we needed in order to adequately present the learning guides to our students. A grant was provided to implement CBVE in the Industrial Education Department.

-- Verbally supportive only -- request of audio aids sent downtown possibly one year wait if approved.

-- Administration has been very cooperative in helping implement CBI in our school, they are anxious to complete CBI in our school. Administration has asked me to find out if library material is available for us -- if so cost, etc.

-- Good support from the staff and administration on the Diesel program, but wonder how this program can be implemented in the Secondary School creditation.

-- Administration was interested in the field testing and wanted to help with what they could.

-- Administration was very good and cooperative in all aspects. Cash advance to come here both times (this set precedence) reproduction of materials no problem. Didn't question me too much about what was going on free hand to do whatever I wanted to do. I could do my thing -- If I needed help, ask for it.

-- They voiced support but none materialized. They learned a lot, and soon will be able to claim knowledge of CBVE.

-- Administration has been behind this field testing but no release time given. They encouraged each program on CBVE. When we got back from the December workshop, they called a volunteer faculty meeting for us instructors to report, but few instructors attended.

-- Mr. Riviere gave me total cooperation in helping to obtain the necessary equipment and supplies to set the department up for CBVE. I don't have a negative comment on our administrators.

-- Administration is very cooperative regarding out needs. Ms. Egon, Ass't Director has offered to work with us in writing and making changes in the Learning Guides.

-- My administration has been very helpful during this field testing project. They are excited about the CBVE programs.

-- Administration has definite -- negative.

-- Administration not involved.

-- Administration was very helpful and cooperative. We were allowed to run field tests without any interference although our grading system is somewhat different and we had to deviate from normal programs.

-- Administration gave full support to field testing.

-- Head of Curriculum Department, Aubrey Gardner, was the most helpful. He ordered the texts and supplies needed. Some other administrators showed little interest.

-- When morale was low, I asked my director to come in and back me. That was the only involvement of administration except that I was told I was the chosen one.

-- The administration was in favor of the use of learning guides; however, they left everything to me -- County supervisor is interested in having summer writers follow this format.

-- From an administrators point, more money will be needed to use a program of this kind.

-- I found that some of the learning guides were way above job entry level. Also much of the terminology was also far too advanced for my students to understand. The reading level should be lowered.

-- Administration very cooperative except for funds. Teachers; mixed feelings.

-- Administration positive.

-- Administration is going all out for CBVE Programs - at my Community College.

-- The administration is backing the project and myself up, no problem.

-- The administration of Westside Skills Center encourages its teachers to take positive steps to improve teaching techniques, especially individualized competency-based instruction. Within reason will invest monies necessary to implement it.

-- Cooperative - willing to let teachers be involved.

-- Administration asked how it was going, full support.

-- No problem with administration, 100% for it!

-- Administration could care less, more interested in Orange Club.

2. Involvement of Faculty:

-- We will implement this with the next new class.

-- Most would like to have access to the same type of materials in their area if others would develop.

-- Part-time instructors did not like at first, later they loved it.

-- Most were anxious to see outcome. None were negative. Some were already using this method.

-- Were interested in helping so they could see if this type of program worked. They disagreeded with some of it, but liked the majority of it.

-- I offered it as an extra grade point on semester grade, even so some got to be very sloppy. Good support from co-workers in the Diesel Shop. Cool attitude toward project from the truck and bus shop.

-- Mixed feelings. One was most helpful. The other felt a waste, which made it difficult working on this program.

-- Positive: if handed together in a neat package with no self effort, they would try it.

-- Negative: feel that too much work for the instructor.

-- This is a mixed adult and high school program. The high school instructor is eager to work with a competency-based program.

-- I personally became a part of the department after field testing was started. I became very interested and excited about this new learning system. One department involves 3 instructors and one co-worker who was somewhat negative -- possible due to lack of understanding the system.

-- No co-worker.

-- Some very cooperative -- some very unhappy at first but after working with Learning Guides they see the advantages of some. Students have a good record for passing State Board, wonder if students on CBVE will still be able to pass State Board as in the past.

-- Called Ridge Cos. Instructor, has good passing record at State Board. Called Erwin Cos. Instructor, also has a good passing record at the State Board.

-- My co-worker would not get involved with this field testing and to this date has not read a task. Hired 3rd instructor in March, Sandy Sawyer, and she has given me a lot of help.

-- Another toy. (Resistant)

-- Other instructors liked the modules. (No problems.)

-- Instructors from what I hear, think it is a step in the right direction.

-- Co-workers are (1) Reluctant to change to a standard student learning guide after developing "their own" format, which took considerable time, (2) many felt standardization will help organize the school.

-- I am from a 3 teacher shop and our teaching philosophies differ, therefore, there are some minor problems in this area, but they can be worked out.

-- Teachers complain of problems, due to the fact of problems with English, they have to teach two systems. The students should stay in IMTS until they can speak Engligh or until they understand it. The problem with it is money, they can't stay in IMTS without an income.

-- Other instructors are now following.

-- Co-workers are negative.

-- How do you adjust time cards for excused absences, assemblies, cuts, and field trips, etc.?

-- Other faculty, none.

-- Need equipment to carry out instruction. (Media.)

-- On the positive side, I found that the time allowed was more than needed. But this cannot be an evaluation, as I started this in the middle of my course.

-- Some teachers thought is was great, others thought it was short and did not come enough.

-- In our school each "shop" or "class" is like a separate school. We do our own thing. Most of the other faculty members weren't even aware of my involvement with the learning guides. Those who liked the concept especially were those who when they learned that the learning guides will eliminate the daily lesson plans required to be submitted weekly, monthly or quarterly.

-- My co-workers felt it was my assignment and not theirs and, in general, were negative throughout.

-- They helped with the task listing review and looked over the learning guides. They did not want the "extra work" of testing modules.

-- Examined materials and gave comments as to quality of materials and helped point out errors, how to make improvements.

-- Co-workers were helpful and cooperative where I had any, but most of the time I had to rely on advanced student help.

-- Minimal discussion among the faculty.

-- Thought it would be nice to have but did not think they would follow it very closely.

-- 50/50 -- some are for, some disapprove. CBVE can be adopted with conventional Learning Guides, could be issued to instructors in all programs, where available. The hardnose instructor will use the material, expose material to instructors.

3. Involvement of Students:

-- Positive: The students thought they learned more, which gave them more than one point of view.

-- Negative: Some students felt there was too much reading from different books. Some parts got boring to the students.

-- Most approved.

-- Some were mad because instructor did not lecture.

-- It was the instructor's fault for most who did not approve.

-- Most thought it great. (Step by step.) Wanted more audio-visual and reference material. Some were lazy, didn't like to do much reading. Could not appreciate the work put into the learning guide. All had positive attitudes about program.

-- Some of the students liked the program and wanted more, but most of the students said this was too much paper work.

-- The students' attitude was "good to cool" for the project.

-- Some of the students "fell flat on their face" others were more honest of their efforts.

-- Students had mixed feelings. Some enjoyed and worked hard; others didn't want to work, had to make them.

-- Motivation good in upper-level student; enjoyed self-paced and self-motivated.

-- Negative: Started late -- too much reading -- no audio.

-- The reaction of the students was mixed. Sixty percent of the group cooperated, the remainder simply refused to work on them.

-- Students were very cooperative but in all cases they had been over most of the material before.

-- Reading was a major problem, they became bored.

-- Learning guides were inadequate in most cases. It required too much instructor time to explain guides.

-- Liked the format. Did not think there was enough "hands on" work.

-- Students feel it is excessive reading material; no visual aids. Also feel it does help get program started. Accepted program with moderation.

-- I feel in the beginning somewhat negative, but as the instructors began our revisions, the enthusiam became apparent to the students and they began to see the advantages of the task to them as excellent learning guides.

-- My students have enjoyed having the task so that they can move on to other things more rapidly. Their main concern is there is so much required reading.

-- Learning guide too long. Books disagree on subject matter.

-- Lets student know where they are in subject and practical areas.

-- Students can study at their own speed.

-- After a brief period of confusion, everything went great. They loved the idea of being able to go on at their own pace. The Ridge Task they felt was too much repeat and wasted too much time.

-- Students not interested in reading the study.

-- Students didn't like reading the different task.

-- Students didn't like work without the instructor.

-- Students were resistant; felt I was picking on them.

-- Students are very interested in working modules again when they have been reworked.

-- Students thought it was good, but needed much improvement.

-- To much skipping back-and-forth between Student Learning Guides and resources.

-- Students liked the knowledge tests.

-- I was late starting in this program therefore my students had performed many of the tasks or had received instruction in the theory so for the most part they thought it was easy.

-- A lot of reading and would like all of the bugs worked out before they get the program!

-- Students positive!

-- Student takes more time to perform task than is suggested in the standard hours; sometimes twice the time alloted.

-- Most liked this method. Problems were with students that were non-readers.

-- Problems holding student's interest and understanding the guide.

-- The students thought it was easy. Others had problems reading and understanding.

-- Students had mixed reactions. Some students followed the guides and enjoyed them. Others hated them and needed someone to stand over them to see that they did the required work.

-- Although I tried to be positive about the project, students saw it as an added burden, which kept them from completing their program in the time they had expected. Two students felt the English tasks were helpful.

-- Students generally liked the learning guides. They said they were easy to follow. They found the three essay questions on the appraisal form hard to fill in.

-- Students reactions varied. Above average students were most helpful. Average students depended on individual students some were most helpful. Some were careless. Below average student were cooperative.

-- Students accepted assignments in the field testing without complaint. Performed tasks as if part of regular procedure. Some gave positive reports on tasks. Others negative on some task. At no time were students pushed into a given direction on their evaluation.

## ORAL COMMENTS FROM INSTRUCTOR PARTICIPANTS SUMMARIZED ON NEWSPRINT IN DISCUSSION GROUP AT EXIT WORKSHOP AFTER COMPLETING 5X8 CARDS

May 17, 1982

### Positive Reactions

1. Administration

   a. Pro CBVE.
   b. Cooperative and let teachers go their own way.
   c. Supportive in providing any help the teacher may need.
   d. Extra supportive in offering any services needed.
   e. Support from county.
   f. Support for tieing together under one structure.
   g. Doesn't give any problems.
   h. Total cooperation from county level and support from in-school administration.
   i. Release time given by administration.
   j. Likes resource area of CBVE.
   k. Purchased resource materials which were needed.
   l. Full Cooperation and support.

2. Co-Workers

   a. Wanted to be part of the field testing.
   b. More of those who are willing to change were pro -- to have orientation with Administration, teachers, etc. should be explained.
   c. Students liked flexibility of Learning Guides.
   d. Takes place of lesson plans.

3. Students

   a. Immediate feedback from Knowledge Test.
   b. Learning Guide tends to lead student step by step, but student needs to take advantage of this.
   c. Can go at their own pace.
   d. Student can see for his/herself where the Learning Guide is taking them.
   e. Learning Guides gave student responsibility.
   f. Students find out that they are accountable for their own time and are happy.
   g. Students mature as a result of the Learning Guides.
   h. Creates enthusiasm.

## Negative Reactions

1. Administration

   a. Uninvolvement of administration.
   b. County level support (word only), school director (indifferent).
   c. Importance of CBVE in secondary setting questionned.
   d. Need for technical assistance.
   e. Need for ESL and mediation in reading.
   f. Lack of knowledge of CBVE among administration (instructors more aware of concept).
   g. Resistance to change, lack of knowledge.
   h. The "do it my way" concept.
   i. Will not provide supplementary release time.
   j. Project requirements not clearly defined for administration. Administration does not understand what is involved in CBVE.
   k. Lack of position paper from State Department.
   l. Need for Audio-Visual for administration to plan and implement CBVE.
   m. Provide courses -- in-service, in CBVE.
   n. Teachers are doing their part, administrators are not.
   o. Develop central location for transporting CBVE strategies.

2. Co-Workers

   a. Did not show any interest.
   b. Resented field test coordinators.
   c. Uncooperative.
   d. Reluctant to change.
   e. Different philosophy.

3. Students

   a. Started enthusiastically, tapered off.
   b. Began too late in the year.
   c. Felt too much switching back and forth from Learning Guides to resources.
   d. Students worked only to pass a "test" not to "learn."
   e. Learning Guides should be more self-contained.
   f. Students could not see the value of field testing.
   g. Difficult terms - difficult reading.
   h. No encouragement from school administration (county or school).
   i. Inservice training of teachers and administration would be of benefit in motivating students.
   j. Students didn't like to recycle.
   k. Students wanted to retest without recycling.

# APPENDIX M

## Suggested Changes in Field Testing Project Procedures

## Suggested Changes in Field Testing Project Procedures

The participants at the Exit Workshop were divided into six groups (by vocational programs being field-tested). They discussed "round table" the procedures that had been used for the project during the school year. Following are the written comments and suggestions for changes that were submitted for consideration by the participants in these groups:

Involve more instructors.

Instructors should be screened and recommended by their immediate supervisors.

Provide written or taped resources with the student learning guides to be field tested.

Provide student learning guides to instructors to familiarize themselves with prior to first meeting.

Better communications between participants and project staff.

Instructors should be reimbursed in advance or while at the conference. They should also be reimbursed for any part-time job from which they must take off time.

Require manditory workshop for administration and participating instructors.

Instructors in this program could be used as advisors.

Discuss actual time to convert to CBVE. Is it official, manditory?

Distribute CBVE resources which are available.

Visit at least once every 30 days by the head of the field-test program or a representative while in practice.

Some type of film presentation of students and instructors in actual operation.

Set or schedule a day or time for testing.

Instructors names and contact phones should be made available so new field-test instructors can call for assistance.

Select participants involved in CBVE projects of their own.

Participants should be teaching in competency-based classes already.

Teachers should all come from one county.

Select people who have administrators who will support the project; administrators who believe in CBVE.

Teachers should have all resources listed before field tests begin.

Administrators and co-workers of participants need orientation.

Grading for college course credit should be based on quality of work as well as quantity.

Modules need to be proofread before being released to field-test sites.

Set up more than one field test at each field-test site.

Be sure tests are provided with all modules.

Send project team to each site to help set up the project.

Include in your letter of invitation to participants a description of the amount of work involved in the project. (Meetings, paperwork, reports.)

Discuss the changes that must be made while using Learning Guides of the CBVE program, and the learning progress of students to be kept and posted for them to see.

Motivation of the student must be made by the instructor, from the start of the program.

Changes in the learning guides must be kept up and recorded for future changes in the guides that come up in the future.

Orientation needed for administration and co-workers as to what exactly is involved and how it can be implemented.

Materials needed for field testing should be available before field-testing begins. Also time out needs to be readily available.

It has been suggested that perhaps different instructors from various occupations should work on different CBVE formats and they should be exchanged and compared.

More orientation for instructors who are to be used prior to the time element that was used in this case.

Standard hours eliminated in field testing.

Be sure of willingness of the instructor to field-test.

Exchange ideas instead of correcting errors in student learning guides.

All persons participating in field-testing should have a comprehensive workshop so that they understand CBVE.

Administration of faculty participants should be asked how much support they are willing to give before participants begin field-testing.

Need a workshop for administrators.

Work up a tentative itemized budget for materials needed for field-testing program.

Field-testing should begin at the very first of the school year.

Choose schools that have equipment and materials needed for field-testing.

Allow more time -- at least a full year for project.

## APPENDIX N

## Evaluation of Exit Workshop for Project

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# EVALUATION OF EXIT WORKSHOP FOR PROJECT

## "Field-Testing CBVE Student Learning Guides Developed at Ridge Vocational-Technical Center"

May 17 and 18, 1982

Court of Flags Hotel
Orlando, Florida

1. What did you like the best about the workshop?

The opportunity to meet with other instructors who participated in the CBVE Project. (3)*
The opportunity to get together to determine what other instructors and schools are doing.
Received a broad view of the CBVE Program.
The revision of the L.P.
Sharing student problems and teachers problems.
Meeting the writers (having questions answered).
It brought everything together.
Getting a break from hectic end-of-year and budget preparations at home.
Turning in all work completed during project.
Meeting the other participants and learning what was going on in other areas.
The opportunity to meet the other instructors and exchange ideas. (8)
Comments from other teachers.
Work with other instructors.
Seeing colleagues I have known for several years.
Being a part of CBVE. (3)
I feel that we accomplished very much in our meeting with the other instructors.
Meeting again with the other instructors and discussing problems encountered. (2)
Informative, knowledgeable.
Lots of togetherness.
It was very educational
It was important to hear problems from instructors. This unified the feelings we each have felt.
Working with all the people from different areas.
The information gained from other instructors.
Interaction with others in the same program area.

2. What did you like least about the workshop?

Too rushed. (4)
Food at restaurant (Quality and Prices!) (4)
Separation of welding participants.
More time for a general meeting between instructors in our own area programs. Hotel food and closed Coffee Shop.
Nothing. (10)
All the paper work.
Everything was fine. (3)
Could be expanded to allow more time to finish agenda items.
Too much smoke in rooms. (2)
Loss of pay from Community Colleges.
The Workshop location.
Having to rewrite instructor comments on white sheets which were already written on yellow sheets. (3)
Cold rooms.
The long drive home.
Food at motel; beds in rooms terrible.
I think this could be reduced to one day.
I wish we had more time for general comments and concerns about CBVE.
I did not like to hear problems some instructors had with their administrations.

3. What topics should we spend more time on in future exit workshops?

Implementing CBVE in the classroom.
Performance test.
Require exchange earlier on corrected material so instructors can be more specific.
Having a party.
Evaluating students and instructors evaluation sheets.
General topics between instructors.
Learning guides. (2)
Comparing findings.
Nothing. (7)
Recordkeeping appropriate to CBVE.
How to get support of administrators; not just the "yes" they give to any and all projects.
New problems; how to set up filing system for CBVE.
More time in evaluating guides.
Orientation for administration and support staff. (3)
Comparison of work between different occupations.
Extending range of guides to keep them in line with changes.
Group discussions.
How to write Learning Guides.
I feel time was well spent in distribution of topics.
Follow same format. (2)
Groups.

New ideas from each participant, and discussions of things that have developed since the first meeting.
Upgrading Learning Guides.
Actual testing experience.

4. How do you plan to use the information and materials shared through this workshop?

I plan to modify my program by using some of the tasks obtained from Ridge Vocational-Technical Center.
Hopefully Lee Tech will have their program ready to go into CBVE.
Implementation in my present program.
Starting a new class.
Useful in program.
Extensively in program.
With fellow instructor at my school.
For correction and implementation.
To help me do a better job with my students.
I plan to implement it into my program.
Hope to implement in the future. (5)
Plan to use information and materials.
Improving our current competency-based program back home.
I'll save it till the administration catches up with other educators and I need it.
I plan to use them next fall in my classes.
To revise the guides and use them.
With the materials I already have developed, I plan to break the packages into entry and senior levels.
To make our department more efficient.
We are already using similar materials.
To improve my present program next semester.
Yes, plan to use.
I am implementing the program.
Part of materials will be used in my course. (3)
I plan to work it into my teaching.
In my classroom.
Update my program.
I plan to use the information.
Help me organize the materials, etc.
Pass on to the next instructor.
To improve Guides at my school.
To improve my program.

5. Circle your overall rating of the workshop (5 = highest rating).

5's - 21
4's - 13
3's - 3

COMMENTS:

Excellent workshop.
I think the exit workshop was very well organized. More so than the orientation workshop.
Excellent workshop; we need more of this.
It was more productive than the other workshop.
It was a great learning experience for me. I enjoyed every minute.
Enjoyed workshop. Learned a great deal from it.
Good.
Again I have gained a greater knowledge from instructors in all the areas. Their problems and solutions have been great.
Next time let's plan a group activity, so the group can meet on a "nonworking" basis.
Keep up the good work -- USF and RIDGE people are lovely.
Rate this hotel wing a low one for this hotel.
Hope we can compare notes in another six months!

* Figures that are in parenthesis indicates the number of like responses from participants.

# APPENDIX O

## Responses on Evaluation of Field Testing Project Forms

## (Collected at the Exit Workshop)

## EVALUATION OF FIELD TESTING PROJECT 1981-82

"Field-Test CBVE Student Learning Guides
Developed at
Ridge Vocational-Technical Center Project"

July 1, 1981 to June 30, 1982

1. What did you like best about your year as a participant in the field-testing project?

I liked being involved at the ground level of an innovation which could possibly be instituted throughout the state.
A new experience.
Working with Student Learning Guides.
The prestige -- the time off -- the association with other professionals.
The opportunity to become involved in competency-based instruction and to learn as much as I did about the writing and use of the learning guides.
It was very interesting and I learned a lot. Comparing your program with other instructors.
It helped me relate to my students better and do my job better. The students gained more information.
Being new to the teaching field (4 years) it has opened my eyes to more than one way to do something. (2)*
Learning about CBVE and exchanging ideas with other instructors.
It gave me much insight into the concept of CBVE. I would like to see this implemented state-wide.
I think I got an education within an education.
I was happy to be part of the field-testing because I have a lot of faith in it.
The exposure to the material in CBVE.
Meeting co-professionals; hearing about their programs; implementing CBVE.
New methods.
For me it was nice to have an exact format to run my class on.
All of it.
The learning packets let the students accept some of the responsibility.
Meeting with other instructors, sharing ideas on CBVE, and viewing guides written by the other instructors. (3)
Rewriting the learning guides.
I liked being able to use the task as is and then revising to fit my own program. The workshops made us aware of what we needed to do to them (Student Learning Guides) so that they would serve our own needs.
Having access to quality curriculum materials.
The self study task listing.
Listening to other teachers comments and discussion on how the learning guides can be improved.

The chance to see it it would work.

It gave me the opportunity to get new insight into CBVE and really understand the system.

I am glad that I have copies of the modules since I feel that I will be called upon to create modules sometime in the future.

The experience of learning more about CBVE and sharing the pro's and con's with the others.

Being exposed to new ideas and exchanging thoughts with others.

Being able to field-test a program that I am familiar with.

I liked the way the project was conducted.

The challenge; learning more about CBVE; the accomplishment I was able to made for my program with the excellent materials provided for me from this project. Also the nice people I met.

The satisfaction of seeing something new work.

2. What was the largest number of students that you had working on the CBVE Learning Guides at any one time?

3 students (2)
5 students (2)
6 students (5)
8 students (5)
9 students (2)
10 students (2)
12 students (2)
13 students (2)
14 students
15 students (2)
15-18 students
18 students (2)
19 students
21 students
23 students
38 students
40 students (two instructors)

What is your normal student/teacher enrollment ratio?

10:1
12:1
14:1
15:1 (3)
16:1
17:1
18:1 (5)
20:1 (17)
21:1
22:1
17-24:1
26:1
30:1
40:1 (2)

3. How do you rate the project staff?

5's - 25
4's - 12

4. How many visits during the school year by the project staff to your campus for technical assistance do you recommend.?

0 visits.
1 visit.
2 visits. (13)
3 visits. (13)
More than 3 visits. (9)
    Once each quarter.
    Five visits per year. (2)
    Once a month.
    I am writing tasks and it requires more time.

5. Do you feel instructor participants should meet for workshops more than twice during the school year?

Yes (22)
No (15)

If yes, how many times and for what purpose?

Twice a year -- to exchange ideas.
A pre-participant workshop (orientation); a meeting to discuss pro's and con's (advantages and disadvantages) and to get help; exit workshop.
About 3 times.
One prior to the beginning of school (Orientation). One about mid-year (Evaluation). One after school is out (Wrap Up).
Once every 60 days, the more often you touch base the better off you are.
Because many questions could be answered which would solve a lot of problems. (I would also save time.)
For management training -- trouble shooting.
Every semester or quarter.
At least quarterly; for group discussions concerning any particular problems encountered and also to share any ideas you feel would benefit other instructors.
Four times for evaluation.
I feel if there was a meeting between the beginning and exit workshop, much more input and feedback would be accomplished.
Maybe 3 or 4 times. New class of students. Beginning, mid-year etc. to respond to how the CBVE is working in your area and get together with other instructors to compare notes which might help each of us. (2)
Four times a year to solve problems.
One additional time per year -- after first month to synthesize procedures.
Three times a year to update.

Once at the beginning -- once before Christmas break -- once mid way second half -- exit year.
Four times -- divide each year into quarters.
I would like to meet with the instructors at least once again after we have begun using our own revisions.
To get the instructor to understand what we are doing in the final testing projection.
To exchange ideas.

6. What did you like least about the field testing project?

Being encouraged to adapt my learning resources.
Enjoyed every minute of it.
Nothing. (6)
Time element for testing and selection of instructors.
We were not prepared at all for it, nor was the local college administration.
I feel I tried to use too many Learning Guides in too short a period of time. I also feel that using them with students who had experience detracted from their study.
The beginning time.
Not enough information given to the school administration for them to fully understand what's going on with the project.
Arranging the material to fit your program.
Not enough time without students to be able to do a better finishing and thorough job. Need more time. (3)
Paperwork.
Wrong information in some Learning Guides.
Not knowing how problem areas should or can be solved. How to plug into your program.
Too short.
Lack of books till almost the end of testing (three weeks).
Was not enough school time to devote to project.
Not enough assistance in the beginning.
The bookkeeping.
No resources, bad time to start.
Once I became acquainted with the Learning Guides, it was easy. But at first, it was difficult.
Lack of support, cooperation, and appreciation by those administrators who volunteered me.
I think the instructors whould have more time with the Learning Guides so the material and A.V. equipment can be obtained easier.
I have no qualms.
No workshops on the field testing before we started doing the testing.
Not having the visual aids I needed. Not enough time to do as thorough a job as I'd like to.
Not enought time to fully test the material.
Involved a lot of paperwork, but necessary. (2)
Not being set up to manage in the lab.

7. Will you use the CBVE Learning Guide approach after this year and your participation in the project?

   Yes. (20)
   Yes; definitely (3)
   Yes -- with revision.
   Yes -- already use same type format.
   Probably within one year.
   Yes, the whole school is slowly working their way to this approach.
   Possibly.
   N/A
   Probably -- but after expansion of tasks.
   Yes, but I have to synchronize it with the county-wide plan.
   Yes, along with my "conventional" materials.
   Yes, to a certain point. It will take a lot of time to fully implement it.
   I hope to begin in the fall semester with the post secondary group.

8. What is the best way we can help you with your administration in the process of implementing CBVE?

   Workshops to educate the administration and co-workers as to exactly what the system is and what it needs to be successful.
   Conduct a workshop during preplanning to educate administrators, teachers, and students in the use of Learning Guides and how they relate to CBVE. Meet with teachers and administrators at the same time.
   Tell them (administrators) it is a must; give us the mechanical tools and software to make it work. At the workshops for the instructors, check with them to double check the programs.
   No problems, but having a staff member (at the local school) to come by to discuss some problems the teachers may have or want to discuss.
   Administration is very helpful at Lee Tech. Our big problem is space for necessary equipment. Hope this will be corrected in the fall.
   Orientation for all administrative and faculty staff involved with CBVE Project.
   Have an overall state wide meeting with them and instruct them to help.
   We now have CBVE.
   Have them to attend a meeting, and bring them up to date as to how CBVE should be taught.
   Get administration's backing, funding, materials, etc.
   Educating administrators.
   I don't have administration problems, because my administrator was teaching Industrial Arts and he has his act together. I found out the teachers who were not getting the backing they needed did not have administrators with the same background.

Keep them up to date on all the progress that is being made in the CBVE program throughout the State.
Talk to the administration staff.
Keeping in touch just like we have. (by visitation or letter) (3)
Make the revised material available to us.
After completion of it (about October) check the packets and other material. Visiting the school and seeing it in progress would be ideal.
Have a workshop for administrators to teach them the amount of work which goes into the project. If they knew anything about CBVE, they would give more support.
Educate administration to the importance of CBVE and the need for them to encourage instructors who are using it.
As far as our department the only thing I can say is, invite them to an all CBVE school and let them see a school that CBVE is working so they will have a better insight and be more informative on this.
Educate the Program Directors, Deans, Vice Principals and Presidents.
My administration is very much in favor of all our programs being CBVE. We have administrative support in abundance.
Keep in touch with us and share the finding of this workshop.
Nothing other than educating the administration on CBVE.
By visits.
Have a personal total commitment before you field-test any programs. Have them tell you how far they will go to implement CBVE.
Train administration.
Workshops to develop tasks that are needed for course --
N/A.
You need to educate those in charge. If they understand and approve of your system, then they should send a participant. If they don't -- they shouldn't send someone to these workshops.
Workshops for Administration and other members of that department.
Get cooperation of administration and get a commitment from them. Offer much released time for department heads to work with staff. Provide curriculum writers to finalize and make materials editorially consistent. Permit school-time staff development points and college credit for writing CBVE.
My school is already moving into this process.
Have a training program for the school/county program.

9. How do you recommend the selection of instructors to participate in the field testing another year?

Ask for volunteers in each school--screen volunteers for best participant.
N/A.
Instructors who are presently involved in the CBVE Field Testing.
Full state coverage and by years of experience.

I think these instructors selected for this field testing should have further workshop.

Should have same instructors, they are already use to it.

New instructors would help. But at the same time the student may suffer by not using instructors that are familiar with the program.

All new instructors, given knowledge of CBVE and Learning Guides functions.

In the same county.

I would like to participate because I am writing some materials.

Train them before they start working on CBVE.

Select instructors which are willing to do more exchanging ideas and learning guides during the year.

Don't know.

From all I've heard the last few day, I think best would be to check with administration you know would release the instructor and be helpful to the instructors involved.

Have a workshop for instructors and explain what is involved.

Basically the same method; choosing instructor from various regions and checking with supervisors of instructors to ensure the ones chosen display motivation toward new innovation.

Get recommendations from Principals, Directors, etc., to make sure the ones you get will know what is expected of them and will work and like what they are doing.

Volunteers.

Select instructors from schools where support is present and the faculty is aware of CBVE.

Ask for recommendations from the instructors' immediate supervisor, director, principal, etc.

By discussing CBVE with the instructor.

After the administration shows total support, then ask for a recommendation of an instructor.

Appointed by work-site supervisors.

Each instructor selected should have the resources required so SLG can be completed as they are given.

I believe it was handled very well this year. No change.

Select those who teach in competency-based settings already. They can more readily do what is required.

By approaching other instructors and administration.

Be sure administration in that center is with you. Select ALL members in a department to function as a testing team -- avoid jealousy and negative cooperation -- would be advisable.

Repeat same method used to select first group of instructors.

Find instructors who are not "locked in" and who will approach this with an open mind.

10. Who did you receive the most help from as you participated in the field-testing project?

Director/Principal (12)
County Office Staff (3)
Regional Office Staff
None of the above (18)
Other
- Co-workers in Diesel not co-workers in Truck/Bus.
- Instructors.
- Ridge Voc/Tech.
- USF - (Dr. Andreyka and Sonia Parmer) and Grace Bliss
- The publishers did send materials but many were not the correct editions.
- Our program writer and other instructors.
- Program Chairperson.
- The resource personnel.
- My associate in school.
- Curriculum Specialist. (2)
- I didn't need their help, also I didn't ask for any.
- Co-workers and students. (2)
- Project staff.
- Instructors from my college.
- Dr. Andreyka and Sonia Parmer particularly.
- Students.
- Project staff -- Wilma and Sonia.
- Jean Finkbiner.

11. Do you feel you need more time with instructors who wrote the materials?

Yes (11)
No (21)

If yes, please explain:

Talking to those who have written Learning Guides can be of great value and help to a person starting for the first time. Can save a lot of time and errors.
New developments on CBVE programs.
They have to come up with new revisions since we started in 1981.
To help explain why they wrote the material in a certain way.
They can clear up some questions which would save time, etc.
Not time with, but there needs to be exchange of materials during the years.
To better understand concept established in writing.
To go through all the tasks, one by one. This takes a lot of time but it's worth it.
More on one to one.
I would like to spend some time in the Center with teacher in the class setting.

12. Additional Comments:

I feel that the project should be viewed more as "Developmental" instead of "Field Testing." The field testing instructors should be willing to exchange ideas and Learning Guides during the year.

Enjoyed this, hope I'll be asked to help you again. Thanks.

I think time is needed for each instructor to set the program up, so he can get it together without problems.

The workshops should be longer. Another day would have allowed more input and a better job.

Excellent endeavor.

It would be good for instructors (present group) to get together 6 months from now and compare notes. Also Erwins Voc Tech format should be looked over for comparisons.

I feel that once we have the learning guides revised, they will be great.

All instructors in areas should be exposed to CBVE -- Learning Guides should be available in all subjects. FEAR: of all instructor replacement should be eliminated. This is one of the biggest problems however, never discussed.

Working with out-dated, first-draft copies, was detrimental.

In the beginning I didn't look forward to it at all, but I enjoyed the project. I learned a great deal, and I believe the students did also.

Greater remuneration/stipend for those participants not needing college credit. I feel short changed. Compensation could be created for the final field test using people in my position as paid consultants, for instance.

* Figures that are in parenthesis indicates the number of like responses.

# APPENDIX P

## Example of the Certificate Presented to Project Participants

# Certificate of Appreciation

This certifies that

________________________________________

in recognition of distinctive achievement in ________________________ and by recommendation of the Committee on Awards, has been awarded this Certificate.

Given on this ________ day of ________________ 19___

UNIVERSITY of SOUTH FLORIDA 1956

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# APPENDIX Q

## University Course Requirements for Staff Development

Undergraduate Credit: 3 semester hours

EVT 4909 Directed Study: Industrial-Technical Education

BTE 4909 Directed Study: Business Education

Graduate Credit: 3 semester hours

EVT 6926 Staff Development

TUITION IS WAIVED, BUT THERE IS A NON-WAIVABLE FEE OF $3.76 PER SEMESTER HOUR or $11.28 CHARGE FOR THE CLASS.

You have received a handout with the purpose of field-testing explained along with the criteria on the reverse side for participating in the project. Please review this handout for details on these four items:

1. Review Task Listing
2. Review Student Learning Guides
3. Field-Test 20-40% of the program's guides with at least three students per guide, writing suggestions for revisions and completing all requested evaluation forms
4. Attend a one-day post field-testing workshop

To receive a grade for the three hours college credit, you must complete according to the criteria explained in the handout ------------

a minimum of 12 learning guides for a "C"

a minimum of 18 learning guides for a "B"

and a minimum of 24 learning guides for an "A."

# APPENDIX R

## RVTC Field-tested Programs' Task Listing

Clerical

Cosmetology

Industrial Electricity

Heavy Duty Truck/Bus Mechanics

Masonry

Welding

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## PROGRAM TASK LISTING

RVTC

| TASK | HOURS | DEPT./PROG.<br>BU 7660 CLERICAL OCCUPATIONS |
|---|---|---|
| | | JOB TITLE: MAIL CLERK, FILE CLERK (Basic tasks) |
| OR | 30 | PARTICIPATING IN ORIENTATION TO RVTC |
| 01 | 7 | Complete orientation to CBVF |
| 02 | 3 | Complete orientation to work habits and attitudes |
| 03 | 5 | Participate in department orientation |
| 04 | 15 | Demonstrate use of IPM equipment |
| OB | 25 | DEMONSTRATING KNOWLEDGE OF EFFECTIVE OFFICE BEHAVIOR |
| 01 | 15 | Acquire knowledge of human relations skills |
| 02 | 10 | Demonstrate good grooming skills |
| CO | 55 | COMMUNICATING ORALLY |
| 01 | 30 | Communicate by speaking and listening |
| 02 | 15 | Communicate by telephone |
| 03 | 10 | Deliver a speech |
| CW | 55 | COMMUNICATING IN WRITING |
| 01 | 5 | Practice handwriting techniques |
| 02 | 5 | Identify information in different reference books |
| 03 | 5 | Record information from a dictionary |
| 04 | 40 | Punctuate sentences |
| TW | 60 | PERFORMING TYPEWRITING TASKS |
| 01 | 15 | Demonstrate correct typewriting techniques |
| 02 | 15 | Demonstrate keyboard control |
| 03 | 30 | Type from facsimile copy |
| MC | 45 | SOLVING BUSINESS MATHEMATICS PROBLEMS |
| 01 | 10 | Solve problems consisting of whole numbers and decimals |
| 02 | 10 | Solve problems consisting of mixed numbers |
| 03 | 5 | Compute percentage, simple interest, and cash discount |
| 04 | 5 | Operate a ten-key adding machine |
| 05 | 15 | Operate an electronic printing calculator |

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## PROGRAM TASK LISTING

RVTC

| TASK | HOURS | DEPT./PROG.<br>BU 7660 CLERICAL OCCUPATIONS |
|---|---|---|
| DP | 20 | ACQUIRING KNOWLEDGE OF PROCESSING BUSINESS DATA |
| 01 | 10 | Recognize methods of electronic data processing |
| 02 | 10 | Read computer printouts |
| MA | 15 | PROCESSING INCOMING AND OUTGOING MAIL |
| 01 | 5 | Classify mail services |
| 02 | 10 | Process incoming and outgoing mail |
| FR | 45 | FILING AND RETRIEVING BUSINESS RECORDS |
| 01 | 35 | File and retrieve materials |
| 02 | 10 | Use specialized filing and storage systems |
| | 350 | TASK HOURS FOR MAIL CLERK, FILE CLERK |
| | | JOB TITLE: RECEPTIONIST |
| | 350 | Previous hours |
| TW | 30 | PERFORMING TYPEWRITING TASKS |
| 04 | 30 | Type from rough-draft copy |
| CW | 85 | COMMUNICATING IN WRITING |
| 05 | 10 | Use capitalization in sentences |
| 06 | 10 | Use numbers in sentences |
| 07 | 10 | Form abbreviations, plurals, and possessives |
| 08 | 25 | Spell words using principles of spelling |
| 09 | 10 | Divide words |
| 10 | 10 | Correct grammar problems |
| 11 | 10 | Proofread written communications |
| OS | 30 | PERFORMING OFFICE SIMULATION |
| 01 | 30 | Simulate receptionist activities |

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## PROGRAM TASK LISTING

RVTC

| TASK | HOURS | DEPT./PROG.<br>BU 7660 CLERICAL OCCUPATIONS |
|---|---|---|
| | 495 | TASK HOURS FOR RECEPTIONIST |
| | | JOB TITLE: GENERAL OFFICE CLERK |
| | 495 | Previous hours |
| TW | 90 | PERFORMING TYPEWRITING TASKS |
| 05 | 30 | Type from partly arranged material |
| 06 | 30 | Type from unarranged material |
| 07 | 30 | Perform production typewriting |
| MC | 65 | SOLVING BUSINESS MATHEMATICS PROBLEMS |
| 06 | 5 | Solve commission problems |
| 07 | 5 | Solve markup and markdown problems |
| 08 | 5 | Solve compound interest problems |
| 09 | 5 | Solve finance charge and APR problems |
| 10 | 10 | Solve metric problems |
| 11 | 20 | Complete ten-key adding machine jobs (MOP) |
| 12 | 15 | Complete calculator jobs (MOP) |
| AC | 100 | ACCOUNTING FOR FINANCIAL TRANSACTIONS |
| 01 | 30 | Journalize and post transactions |
| 02 | 30 | Close ledger and interpret financial data |
| 03 | 25 | Acquire knowledge of banking and payroll activities |
| 10 | 15 | Prepare income tax returns |
| OS | 40 | PERFORMING OFFICE SIMULATION |
| 02 | 40 | Handle clerical tasks in a small office |
| | 790 | TASK HOURS FOR GENERAL OFFICE CLERK |
| | | JOB TITLE: CLERK TYPIST |
| | 790 | Previous hours |

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## PROGRAM TASK LISTING

RVTC

| TASK | HOURS | DEPT./PROG.<br>BU 7660 CLERICAL OCCUPATIONS |
|---|---|---|
| RE | 10 | REPRODUCING BUSINESS RECORDS |
| 01 | 2 | Select best copying/duplicating method |
| 02 | 4 | Type, correct and run spirit masters |
| 03 | 4 | Type, correct and run stencils |
| MT | 20 | TRANSCRIBING MACHINE DICTATION |
| 01 | 10 | Operate transcription machine |
| 02 | 10 | Transcribe recorded dictation |
| CW | 40 | COMMUNICATING IN WRITING |
| 12 | 40 | Compose and type communication media |
| OS | 40 | PERFORMING OFFICE SIMULATION |
| 03 | 40 | Handle clerical tasks in a large office |
| JA | 45 | APPLYING FOR A JOB |
| 01 | 10 | Prepare a resume |
| 02 | 10 | Write letters of application |
| 03 | 5 | Complete application form |
| 04 | 5 | Participate in a job interview |
| 05 | 5 | Acquire techniques for job success |
| 06 | 10 | Take an employment test |
| | 945 | TASK HOURS FOR CLERK-TYPIST |
| TOTAL | 945 | Revised 7/17/81 |

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Cosmetology

## PROGRAM TASK LISTING

RVTC

| TASK | HOURS | DEPT./PROG.<br>IN 9205 COSMETOLOGY |
|---|---|---|
| A | 45 | PARTICIPATING IN ORIENTATION TO RVTC |
| 01 | 7 | Complete orientation to CDVE |
| 02 | 3 | Complete orientation to good work habits |
| 03 | 10 | Participate in orientation to Ridge Cosmetology Department |
| 04 | 5 | Identify cosmetology career opportunities |
| 05 | 20 | Identify state law and ethics |
| B | 30 | RELATING SANITATION AND CHEMISTRY TO COSMETOLOGY |
| 01 | 15 | Set up a wet and dry sanitizer |
| 02 | 15 | Identify principles of chemistry related to cosmetology |
| C | 120 | SHAMPOOING AND CONDITIONING HAIR AND SCALP |
| 01 | 20 | Define trichology |
| 02 | 20 | Give a shampoo |
| 03 | 5 | Apply conditioner |
| 04 | 15 | Give a scalp treatment |
| 05 | 45 | Services: Scalp Treatment (45)* |
| 06 | 15 | Services: Shampoo (50)* |
| D | 95 | SHAPING THE HAIR |
| 01 | 5 | Identify hairshaping instruments |
| 02 | 20 | Give a scissor shaping |
| 03 | 15 | Give a razor shaping |
| 04 | 55 | Services: Hairshaping (75)* |
| E | 275 | STYLING THE HAIR |
| 01 | 15 | Define the principles of design in creating a hairstyle |
| 02 | 25 | Create a finger-wave hairstyle |
| 03 | 25 | Create a hairstyle using three kinds of sculpture curls |
| 04 | 20 | Create a roller hairstyle |
| 05 | 20 | Blow wave and iron curl hair |
| 06 | 20 | Straighten the hair with pressing comb and curl with iron |
| 07 | 150 | Services: Hair Arranging (300)* |
| F | 315 | CURLING AND STRAIGHTENING THE HAIR |
| 01 | 50 | Give a cold wave |
| 02 | 50 | Straighten the hair chemically |
| 03 | 15 | Curl hair chemically |
| 04 | 200 | Services: Chemical Waving, Straightening, Relaxing (65)* |
|  |  | *Numbers in parenthesis indicate number of minimum services required by State Board of Cosmetology. |

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## PROGRAM TASK LISTING

RVTC

| TASK | HOURS | DEPT./PROG.<br>IN 9205 COSMETOLOGY |
|---|---|---|
| G | 220 | TINTING AND BLEACHING THE HAIR |
| 01 | 50 | Apply a permanent hair color |
| 02 | 10 | Apply a temporary hair color |
| 03 | 10 | Apply a semi-permanent hair color |
| 04 | 50 | Apply a bleach and retouch |
| 05 | 25 | Apply frostings and decorative effects |
| 06 | 75 | Services: Hair Coloring (25)* |
| H | 80 | GIVING FACIAL TREATMENTS |
| 01 | 15 | Describe the skin |
| 02 | 15 | Give a facial |
| 03 | 20 | Remove unwanted hair |
| 04 | 10 | Apply makeup |
| 05 | 10 | Services: Facial (10)* |
| 06 | 10 | Services: Hair Removal (10)* |
| I | 10 | GIVING MANICURES AND PEDICURES |
| 01 | 5 | Give a manicure |
| 02 | 5 | Give a pedicure |
| J | 10 | OPERATING A BEAUTY SALON |
| 01 | 5 | Identify prerequisites for opening a beauty salon |
| 02 | 5 | Identify prerequisites for obtaining employment |
|  |  | *Numbers in parenthesis indicate number of minimum services required by State Board of Cosmetology. |
| TOTAL | 1200 | Revised 8/21/81 |

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## PROGRAM TASK LISTING

RVTC

| TASK | HOURS | DEPT./PROG. IN 9273 INDUSTRIAL ELECTRICITY |
|---|---|---|
| A | 12 | PARTICIPATING IN ORIENTATION TO RVTC |
| 01 | 7 | Complete orientation to CBVE |
| 02 | 3 | Complete orientation to good work habits |
| 03 | 2 | Identify electrical and shop safety practices |
| B | 552 | ACQUIRING FUNDAMENTALS OF ELECTRICITY |
| 01 | 10 | Acquire general knowledge of electricity |
| 02 | 15 | Demonstrate and use ohm's law |
| 03 | 10 | Define electrical terminology and draw electric symbols |
| 04 | 10 | Analyse DC circuits with a volt-ohm-milliammeter |
| 05 | 10 | Calculate values in DC series circuits |
| 06 | 10 | Determine resistor values |
| 07 | 15 | Calculate values in DC parallel circuits |
| 08 | 10 | Connect batteries in DC circuits |
| 09 | 15 | Calculate and measure electrical energy |
| 10 | 9 | Identify conduction in liquids and gases |
| 11 | 10 | Identify magnetic properties and electromagnetism |
| 12 | 10 | Describe and test rectifiers and semi-conductors |
| 13 | 10 | Describe and analyse AC circuits |
| 14 | 15 | Analyze AC and DC circuits containing inductance |
| 15 | 15 | Identify and analyse AC and DC circuits containing capacitance |
| 16 | 15 | Analyze and calculate AC series circuits |
| 17 | 15 | Analyze and calculate AC parallel circuits |
| 18 | 10 | Describe generation of electromotive force |
| 19 | 15 | Connect DC generators |
| 20 | 15 | Connect DC motors |
| 21 | 15 | Describe basic principles of transformers |
| 22 | 20 | Make polyphase connections of transformers |
| 23 | 15 | Make polyphase connections using commercial transformers |
| 24 | 10 | Describe special transformer applications |
| 25 | 20 | Connect alternators |
| 26 | 18 | Connect single-phase AC motors |
| 27 | 20 | Connect three-phase motors |
| 28 | 25 | Identify principles of automatic motor controllers |
| 29 | 30 | Describe and connect DC motor controllers |
| 30 | 80 | Describe and connect AC motor controllers |
|  | 55 | Work on special assignments |
| C | 285 | INSTALLING ELECTRIC WIRE AND EQUIPMENT |
| 01 | 15 | Determine electrical conductor ampacity and conduit conductor capacity |
| 02 | 15 | Identify wiring methods and materials (splicing) |
| 03 | 15 | Wire bell circuits |
| 04 | 10 | Wire ceiling light controlled by wall switch |
| 05 | 10 | Wire three-way switches |
| 06 | 10 | Wire four-way switches |
| 07 | 10 | Wire a switched receptacle |
| 08 | 10 | Install and connect a flourescent lamp |
| 09 | 15 | Explain the use of the National Electric Code (NEC) |

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## PROGRAM TASK LISTING

RVTC

| TASK | HOURS | DEPT./PROG. IN 9273 INDUSTRIAL ELECTRICITY |
|---|---|---|
| 10 | 10 | Calculate load requirements for residences |
| 11 | 45 | Install and connect wiring in a simulated residence |
| 12 | 15 | Bend emt conduit |
| 13 | 10 | Cut and thread conduit nipples |
| 14 | 5 | Use knock-out (KO) punches |
| 15 | 10 | Bend rigid conduit |
| 16 | 15 | Wire remote control systems |
|  | 65 | Work on special assignments |
| D | 70 | REPAIRING ELECTRICAL EQUIPMENT |
| 01 | 15 | Troubleshoot residential wiring |
| 02 | 25 | Troubleshoot motor controllers |
|  | 30 | Work on special assignments |
| E | 26 | WELDING ELECTRICAL EQUIPMENT |
| 01 | 10 | Cut mild steel using oxyacetylene equipment |
| 02 | 16 | Strike and control arc and run short beads |
| TOTAL | 945 | Revised 6/9/81 |

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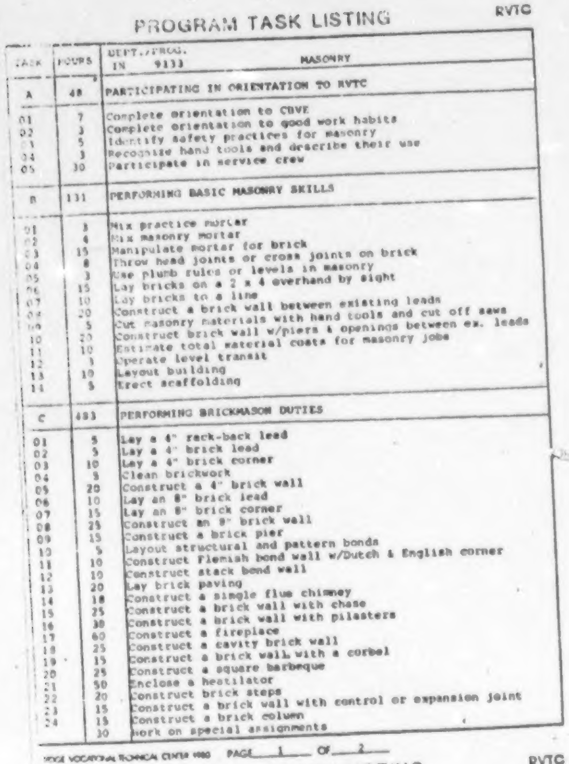

## PROGRAM TASK LISTING

RVTC

| TASK | HOURS | DEPT./PROG. IN 9133 MASONRY |
|---|---|---|
| A | 48 | PARTICIPATING IN ORIENTATION TO RVTC |
| 01 | 7 | Complete orientation to CBVE |
| 02 | 3 | Complete orientation to good work habits |
| 03 | 5 | Identify safety practices for masonry |
| 04 | 3 | Recognize hand tools and describe their use |
| 05 | 30 | Participate in service crew |
| B | 131 | PERFORMING BASIC MASONRY SKILLS |
| 01 | 3 | Mix practice mortar |
| 02 | 4 | Mix masonry mortar |
| 03 | 15 | Manipulate mortar for brick |
| 04 | 8 | Throw head joints or cross joints on brick |
| 05 | 3 | Use plumb rules or levels in masonry |
| 06 | 15 | Lay bricks on a 2 x 4 overhand by sight |
| 07 | 10 | Lay bricks to a line |
| 08 | 20 | Construct a brick wall between existing leads |
| 09 | 5 | Cut masonry materials with hand tools and cut off saws |
| 10 | 20 | Construct brick wall w/piers & openings between ex. leads |
| 11 | 10 | Estimate total material costs for masonry jobs |
| 12 | 3 | Operate level transit |
| 13 | 10 | Layout building |
| 14 | 5 | Erect scaffolding |
| C | 483 | PERFORMING BRICKMASON DUTIES |
| 01 | 5 | Lay a 4" rack-back lead |
| 02 | 5 | Lay a 4" brick lead |
| 03 | 10 | Lay a 4" brick corner |
| 04 | 5 | Clean brickwork |
| 05 | 20 | Construct a 4" brick wall |
| 06 | 10 | Lay an 8" brick lead |
| 07 | 15 | Lay an 8" brick corner |
| 08 | 25 | Construct an 8" brick wall |
| 09 | 15 | Construct a brick pier |
| 10 | 5 | Layout structural and pattern bonds |
| 11 | 10 | Construct Flemish bond wall w/Dutch & English corner |
| 12 | 10 | Construct stack bond wall |
| 13 | 20 | Lay brick paving |
| 14 | 18 | Construct a single flue chimney |
| 15 | 25 | Construct a brick wall with chase |
| 16 | 30 | Construct a brick wall with pilasters |
| 17 | 60 | Construct a fireplace |
| 18 | 25 | Construct a cavity brick wall |
| 19 | 15 | Construct a brick wall with a corbel |
| 20 | 25 | Construct a square barbeque |
| 21 | 50 | Enclose a heatilator |
| 22 | 20 | Construct brick steps |
| 23 | 15 | Construct a brick wall with control or expansion joint |
| 24 | 15 | Construct a brick column |
|  | 30 | Work on special assignments |

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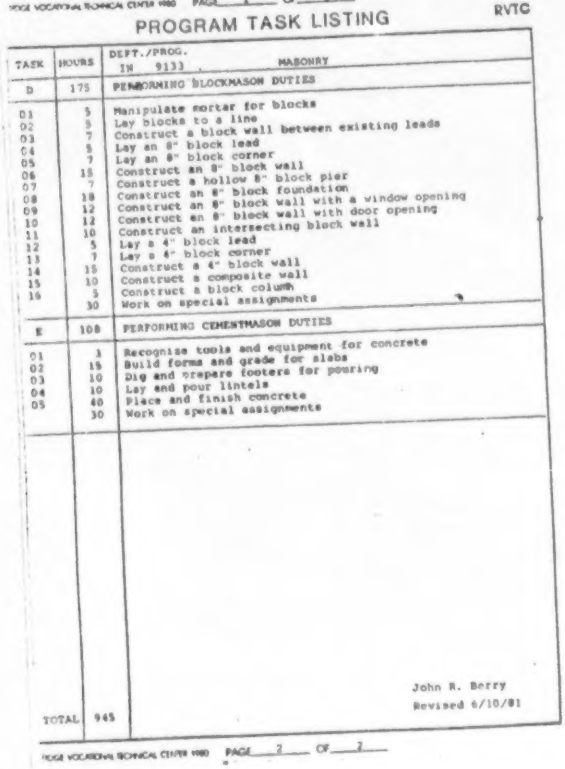

## PROGRAM TASK LISTING

RVTC

| TASK | HOURS | DEPT./PROG. IN 9133 . MASONRY |
|---|---|---|
| D | 175 | PERFORMING BLOCKMASON DUTIES |
| 01 | 5 | Manipulate mortar for blocks |
| 02 | 5 | Lay blocks to a line |
| 03 | 7 | Construct a block wall between existing leads |
| 04 | 5 | Lay an 8" block lead |
| 05 | 7 | Lay an 8" block corner |
| 06 | 15 | Construct an 8" block wall |
| 07 | 7 | Construct a hollow 8" block pier |
| 08 | 18 | Construct an 8" block foundation |
| 09 | 12 | Construct an 8" block wall with a window opening |
| 10 | 12 | Construct an 8" block wall with door opening |
| 11 | 10 | Construct an intersecting block wall |
| 12 | 5 | Lay a 4" block lead |
| 13 | 7 | Lay a 4" block corner |
| 14 | 15 | Construct a 4" block wall |
| 15 | 10 | Construct a composite wall |
| 16 | 5 | Construct a block column |
|  | 30 | Work on special assignments |
| E | 108 | PERFORMING CEMENTMASON DUTIES |
| 01 | 3 | Recognize tools and equipment for concrete |
| 02 | 15 | Build forms and grade for slabs |
| 03 | 10 | Dig and prepare footers for pouring |
| 04 | 10 | Lay and pour lintels |
| 05 | 40 | Place and finish concrete |
|  | 30 | Work on special assignments |
| TOTAL | 945 | John R. Berry<br>Revised 6/10/81 |

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## PROGRAM TASK LISTING

RVTC

| TASK | HOURS | DEPT./PROG. DECENTRALIZED WELDING PROJECT |
|---|---|---|
| Duty A | | IDENTIFYING ORIENTATION AND SAFETY PRACTICES IN WELDING |
| 01 | | Complete orientation to CRVE |
| 02 | | Complete orientation to work habits and attitudes |
| 03 | | Identify safety practices |
| 04 | | Operate audiovisual equipment |
| Duty B | | DEVELOPING EMPLOYABILITY SKILLS |
| 01 | | Prepare for a job interview |
| 02 | | Conduct a job search |
| 03 | | Demonstrate knowledge of job changes |
| Duty C | | WORKING WITH BLUEPRINTS |
| 01 | | Interpret detailed drawing |
| 02 | | List materials for fabrication from blueprint |
| 03 | | Develop shop drawings |
| Duty D | | IDENTIFYING METALS |
| 01 | | Identify metals by appearance and weight |
| 02 | | Identify metals by spark test |
| 03 | | Classify metals by magnetic properties |
| Duty E | | OPERATING EQUIPMENT AND TOOLS |
| 01 | | Perform cutting operations manually |
| 02 | | Perform bending operations manually |
| 03 | | Perform finishing operations manually |
| 04 | | Perform cutting operations with power equipment |
| 05 | | Perform bending operations with power equipment |
| 06 | | Perform drilling operations with power equipment |
| 07 | | Perform punching operations with power equipment |
| 08 | | Perform finishing operations with power equipment |
| Duty F | | OPERATING GAS WELDING EQUIPMENT |
| 01 | | Setup oxy-fuel equipment |
| 02 | | Cut carbon steel using oxy-fuel equipment |
| 03 | | Gas weld carbon steel joints |
| 04 | | Gas weld cast iron |
| 05 | | Braze ferrous and nonferrous metals |
| 06 | | Silver braze copper pipe joints |
| 07 | | Lead-solder ferrous and nonferrous metals |
| 08 | | Hand form metals with gas equipment |
| 09 | | Remove distortion using gas equipment |
| | | cont. |

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## PROGRAM TASK LISTING

RVTC

| TASK | HOURS | DEPT./PROG. DECENTRALIZED WELDING PROJECT |
|---|---|---|
| Duty G | | OPERATING ARC WELDING EQUIPMENT |
| 01 | | Run short beads |
| 02 | | Perform surfacing operations: flat position |
| 03 | | Weld single and multiple pass lap joints: horizontal position |
| 04 | | Weld multiple pass "tee" joints: horizontal position |
| 05 | | Weld outside corner joints: flat position |
| 06 | | Weld butt joints: flat position |
| 07 | | Weld single and multiple pass lap joints: true horizontal position |
| 08 | | Weld multiple pass "tee" joints: true horizontal position |
| 09 | | Weld outside corner joints: horizontal position |
| 10 | | Weld butt joints: horizontal position |
| 11 | | Weld single and multiple pass lap joints: vertical position |
| 12 | | Weld multiple pass "tee" joints: vertical position |
| 13 | | Weld outside corner joints: vertical position |
| 14 | | Weld butt joints: vertical position |
| 15 | | Weld single and multiple pass lap joints: overhead position |
| 16 | | Weld multiple pass "tee" joints: overhead position |
| 17 | | Weld outside corner joints: overhead position |
| 18 | | Weld butt joints: overhead position |
| 19 | | Weld with the low-hydrogen electrodes |
| 20 | | Weld guided bend test plates: all positions |
| 21 | | Perform cutting operations with SMAW equipment |
| Duty H | | OPERATING GAS SHIELDED ARC WELDING EQUIPMENT |
| 01 | | Assemble GTAW equipment |
| 02 | | Weld mild steel joints with GTAW equipment |
| 03 | | Weld stainless steel joints with GTAW equipment |
| 04 | | Weld aluminum joints with GTAW equipment |
| 05 | | Deposit weld beads with GMAW equipment |
| 06 | | Weld mild steel joints with GMAW equipment |
| 07 | | Weld aluminum joints with GMAW equipment |
| 08 | | Weld stainless steel joints with GMAW equipment |
| Duty I | | FABRICATING PIPE JOINTS |
| 01 | | Prepare pipe joints for welding |
| 02 | | Setup and weld pipe joints |
| Duty J | | PERFORMING COMBINATION WELDING SKILLS |
| 01 | | Repair products from ferrous/nonferrous metals |
| 02 | | Fabricate products from ferrous/nonferrous metals |
| | | Revised 11/1/81 |

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